



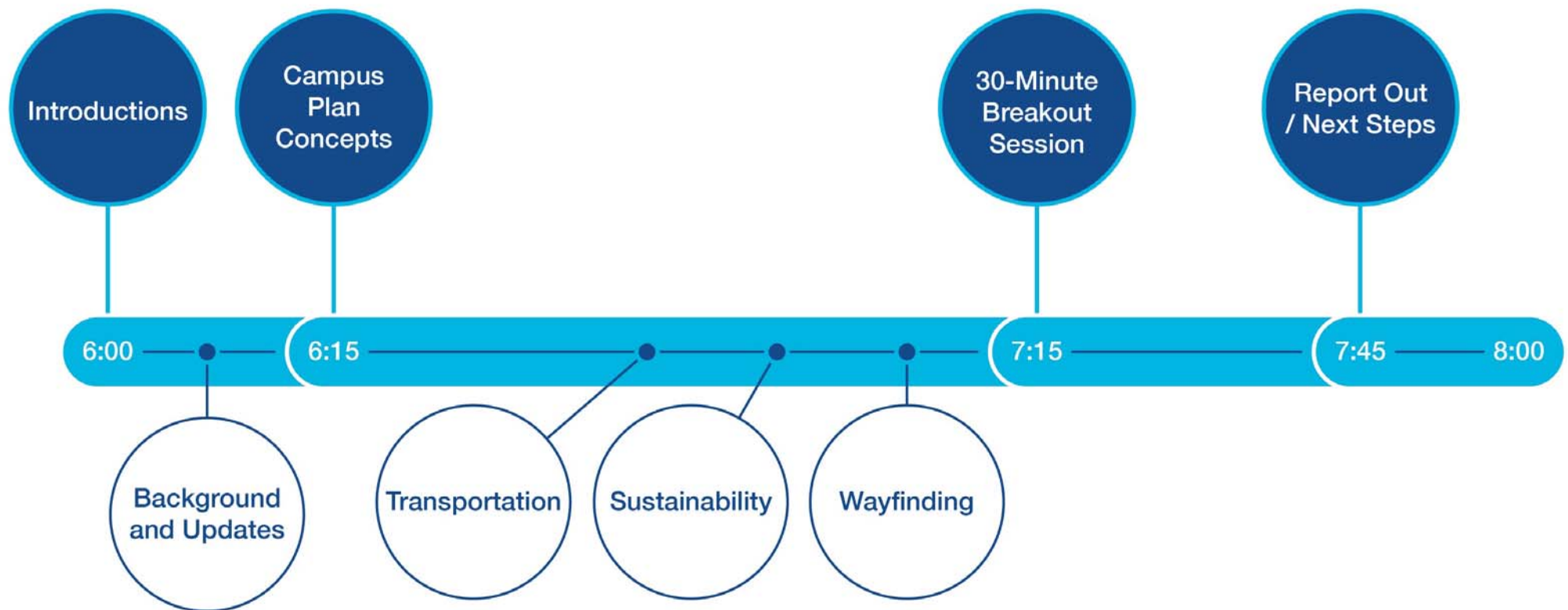
| SMMA

T'OOLE
DESIGN

BCA

Central Hill Campus – Community Meeting #2

Tonight's Agenda



Campus Plan Committee

- **Kristen Stelljes**, Somerville Community Preservation Act Manager
- **Bryan Bishop**, Director of Veterans
- **Glenn Ferdman**, Director, Library
- **Robert King**, Director of Capital Projects and Planning
- **Emily Monea**, Director, SomerStat
- **George Proakis**, Director, Planning and Zoning
- **Brad Rawson**, Director, Transportation and Infrastructure
- **Mike Tremblay**, Senior Transportation Planner
- **Oliver Sellers-Garcia**, Director, Office of Sustainability and Environment
- **Melissa Woods**, Senior Long Range Planner

Planning Team

SMMA

- **Alex Pitkin**, Senior Vice President
- **Lorraine Finnegan**, Principal
- **Samantha Farrell**, Landscape Architect
- **Elizabeth Galloway**, Sustainable Designer
- **Laura Monies**, Landscape Architect/Planner
- **Erin Prestileo**, Civil Engineer
- **Ali Ucci**, Graphic Designer
- **Jack Dombrowski**, Graphic Designer
- **Marisa Fryer**, Site Designer

Building Conservation Associates

- **Lisa Howe**, Director of BCA New England

Toole Design Group

- **Ashley Haire**, Project Engineer
- **Stephanie Weyer**, Landscape Designer

Project Timeline

- Community Meeting #1 May 31, 2018
- Parking Study Meetings 1-3 Summer, 2018
- Memorials Commission Meeting June 20, 2018
- Community Meeting #2 Sept 25, 2018
- **Parking Study Meeting #4** **Sept 27, 2018**
- Community Meeting #3 Oct 18, 2018
- Campus Planning Study Complete Dec 28, 2018

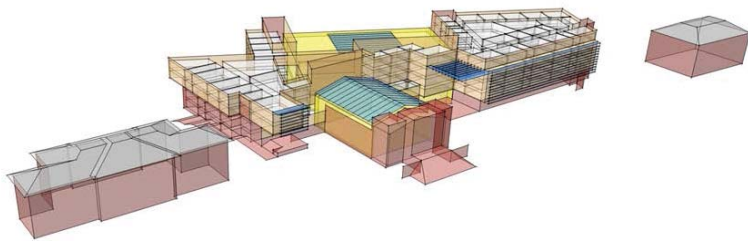
Background and SHS Project Updates

SHS Project Update

Brief Site History & Analysis

Memorials & Monuments

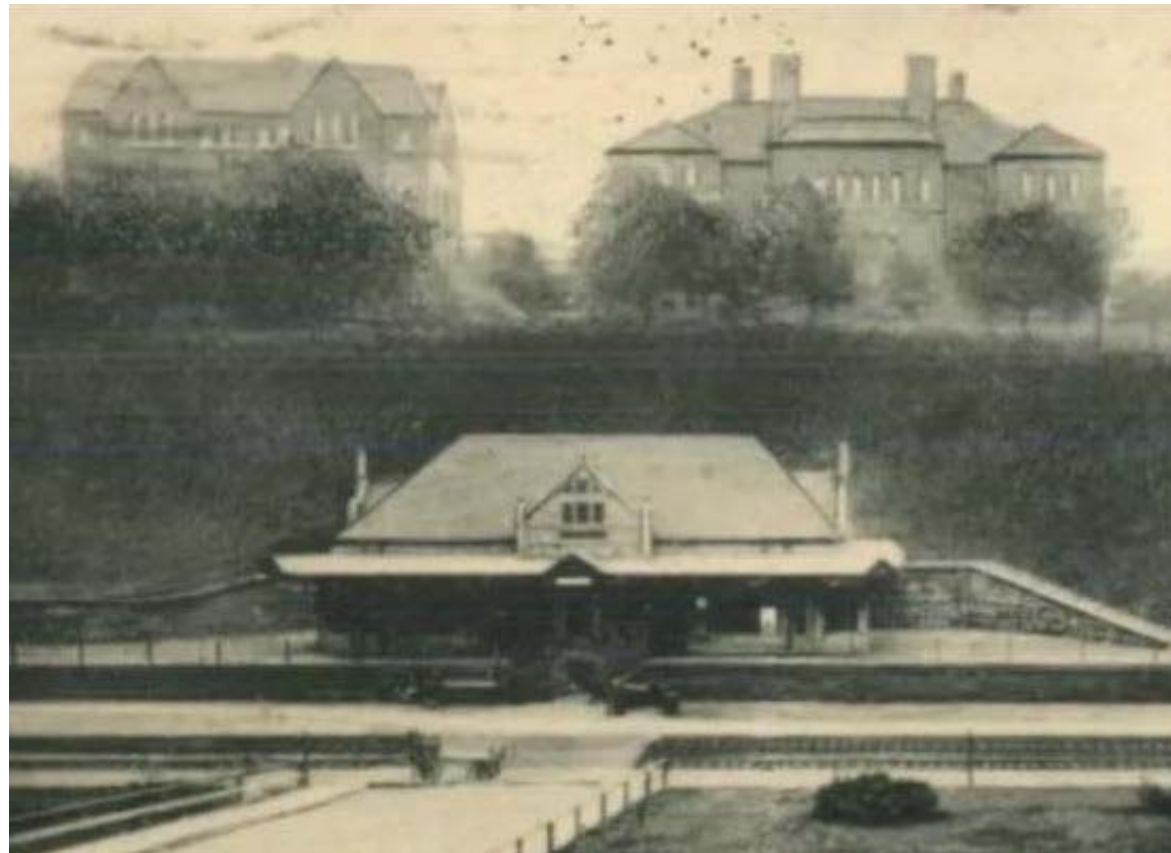
New SHS Highland Avenue Perspectives



Medford Street Perspective

Uniquely Central Hill

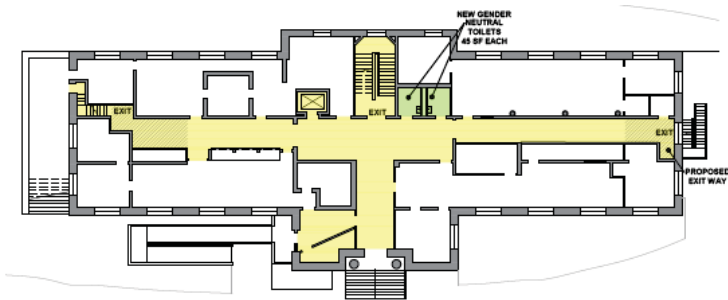
- GLX access
- Creation of New Open Space
- Balance of Neighborhood & Civic uses



New SHS Medford Street Perspective

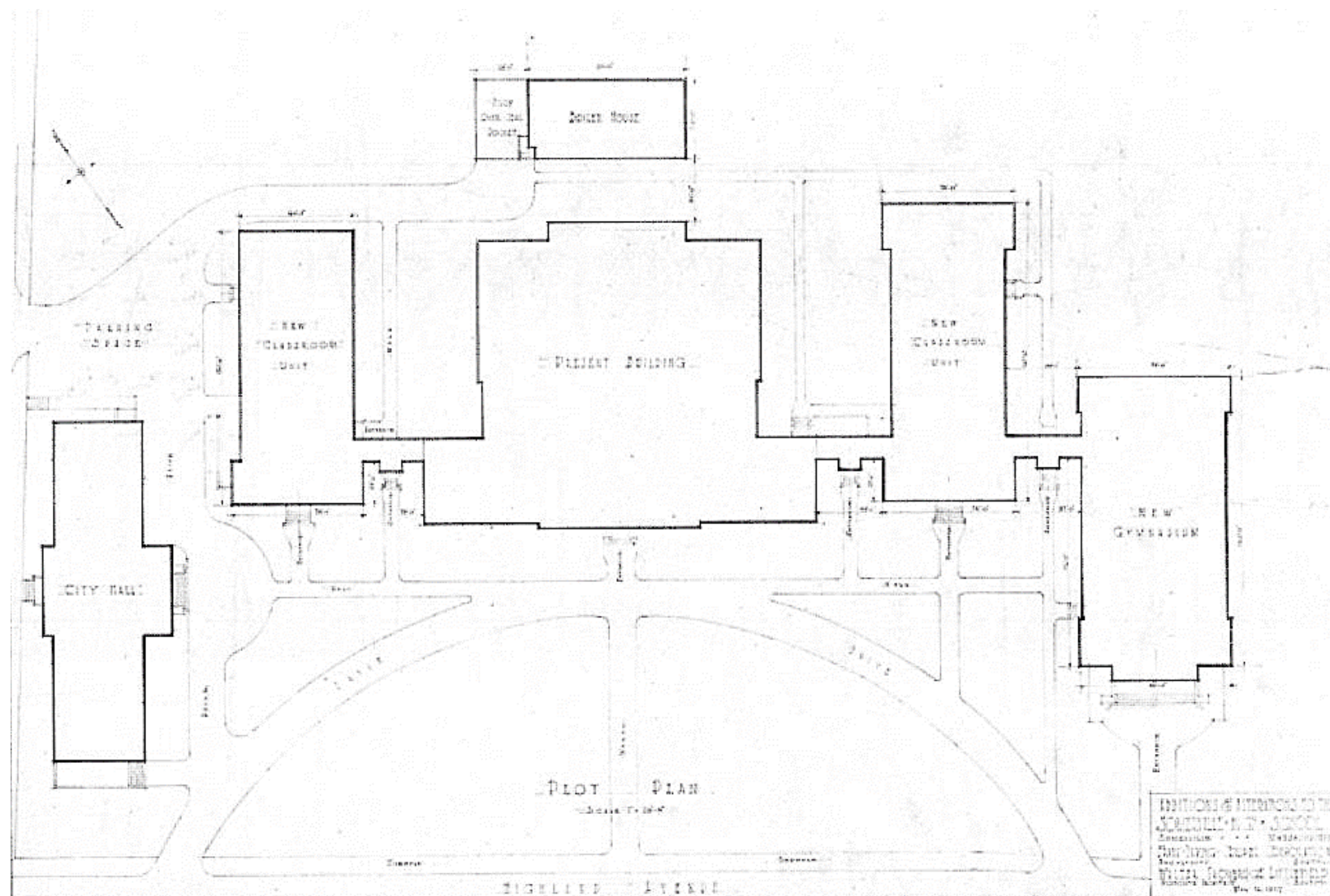






Existing First Floor plan














KEY NOTES

-  Removed, restored and stored off site. Part of High School project.
-  Reinstalled at High School.
-  No work scheduled as part of High School project.

Example Monument Scan

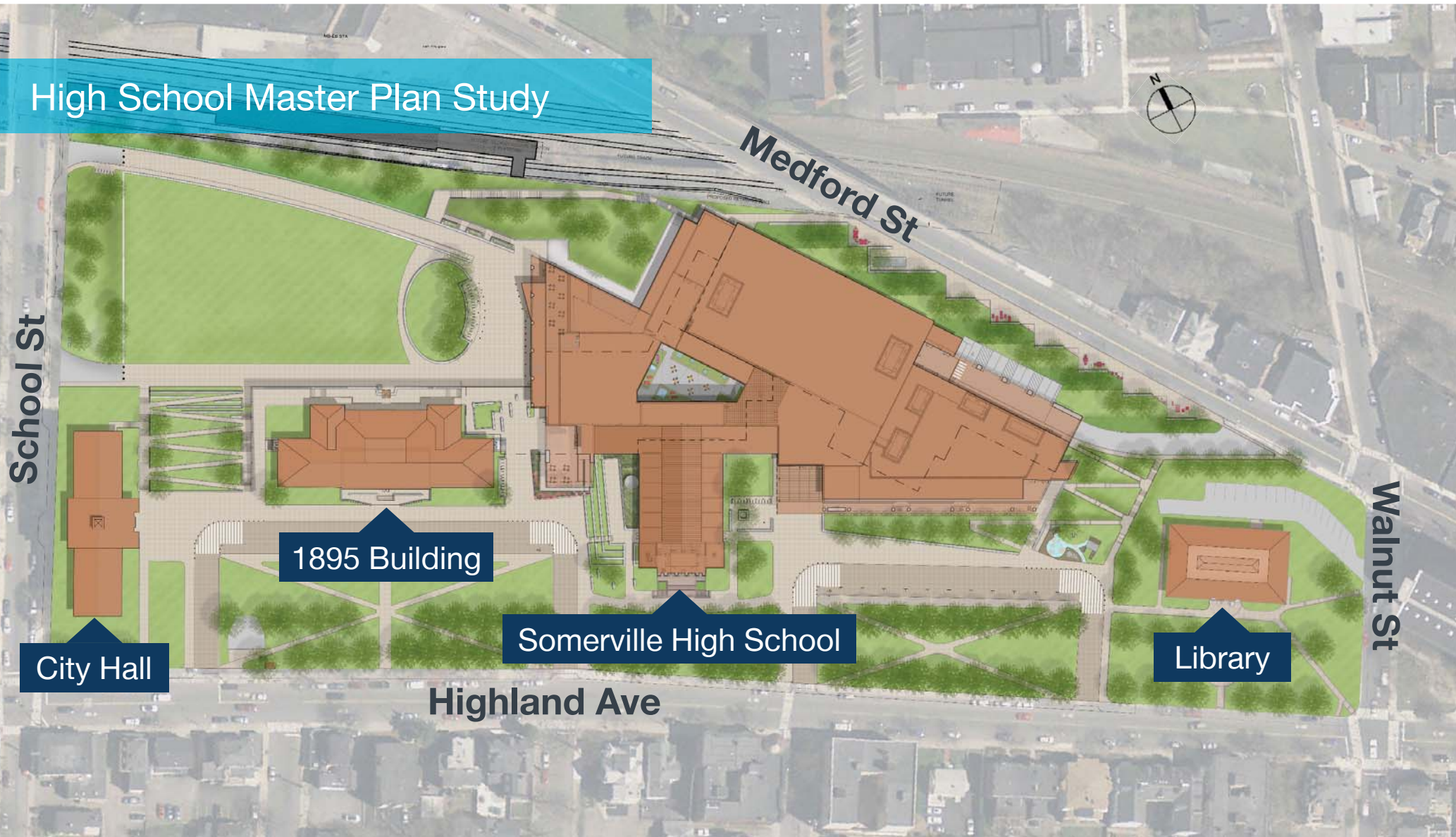
WWI Monument located in Union Square



Existing Campus Gateways



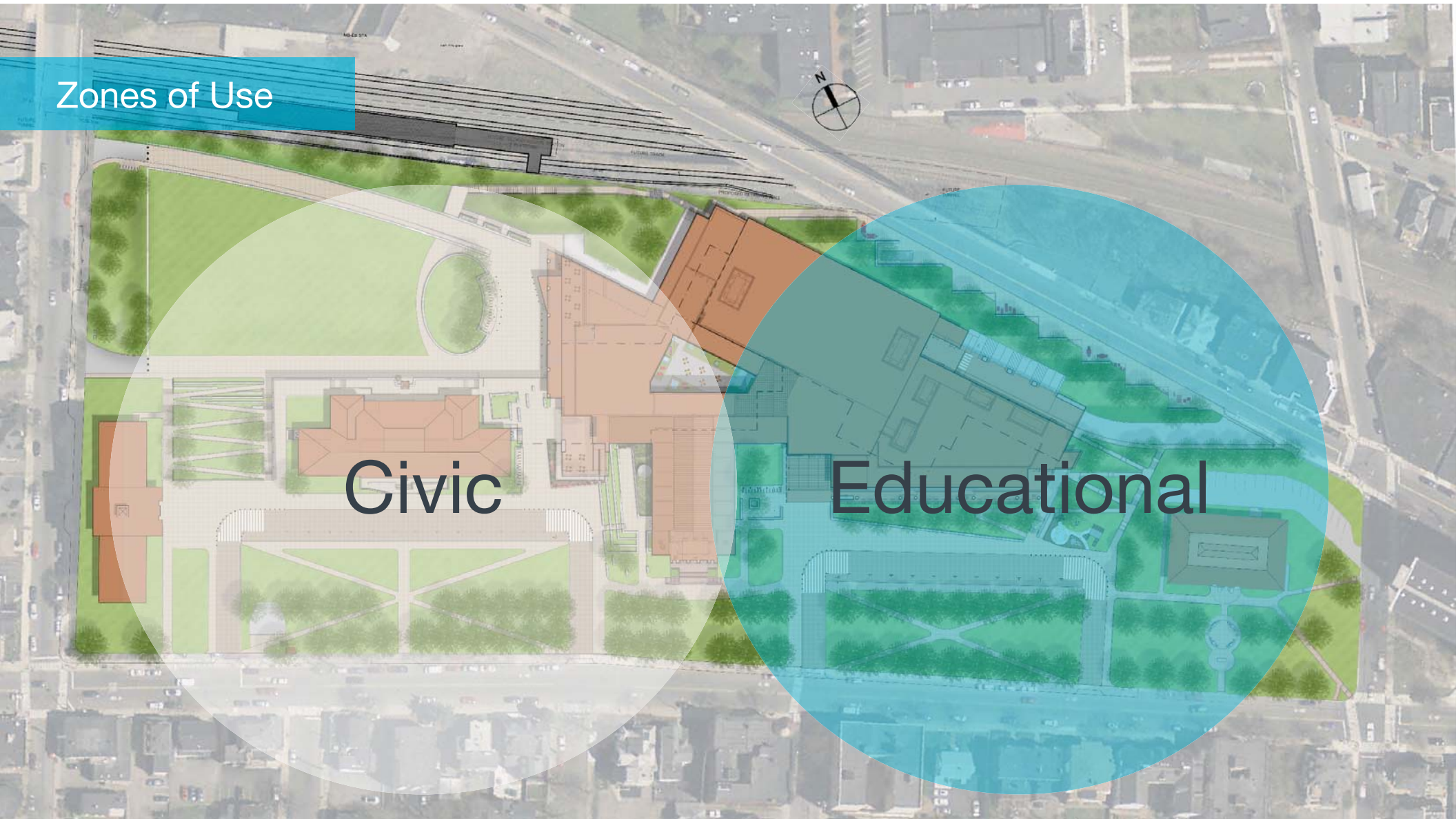
High School Master Plan Study



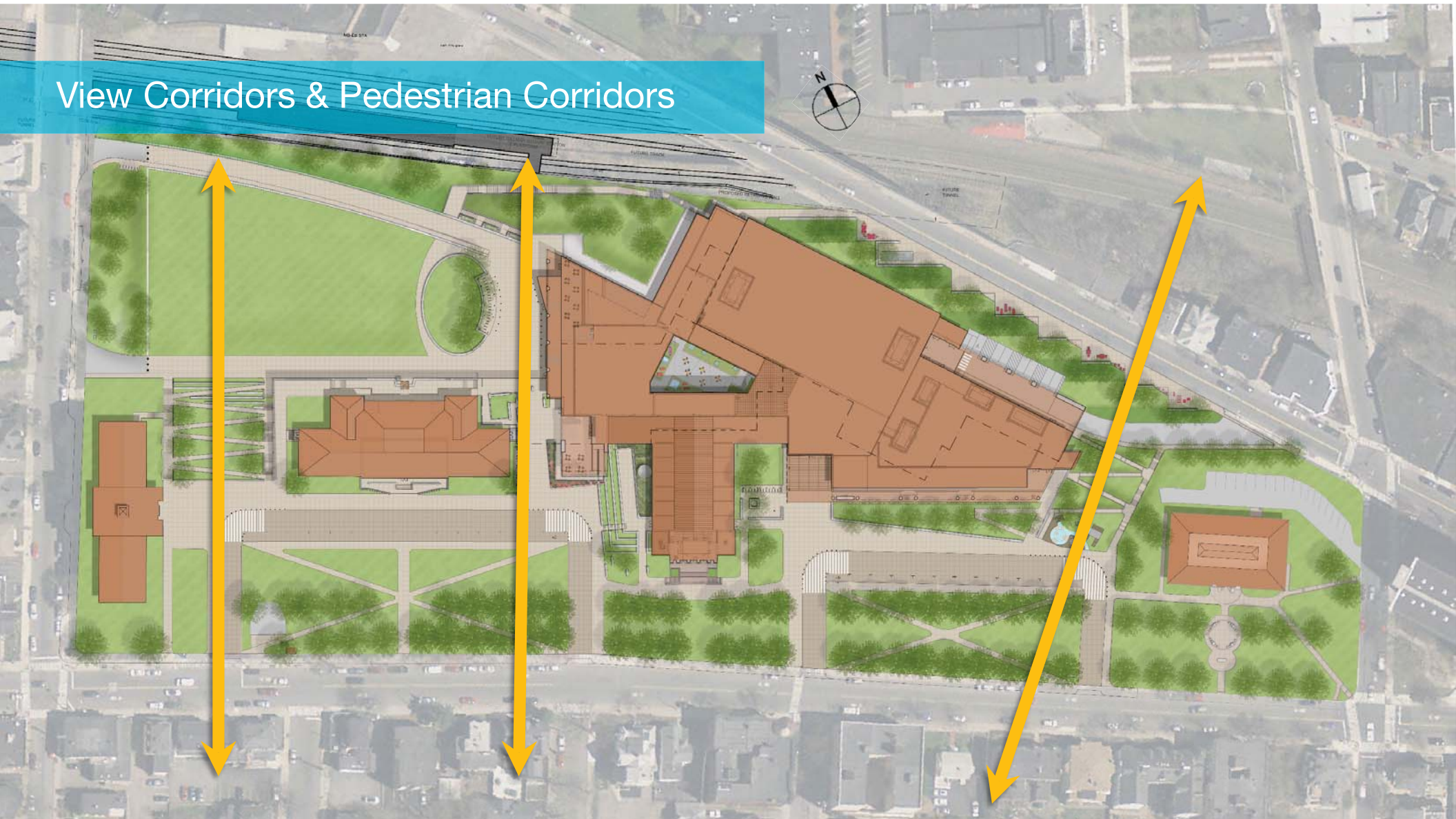
Zones of Use

Civic

Educational



View Corridors & Pedestrian Corridors



Campus Visitors: Today



4. Central Library
- 24 Full time Staff
 - 6 Part time Staff
 - 179,086 Visits in 2017

1. City Hall
- 127 Full time Staff
 - 6 Part time Staff
 - 14 Offices / Agencies

2. Plaza
- 5+ Annual Events
 - 500 to 1,500 attendees
 - 3 to 4 Annual Special Rallies
 - 100 to 3,000 attendees

3. Somerville High School
- 234 Full time Staff
 - 1300 Students
 - Open 7am-10pm Weekdays

Campus Visitors: After

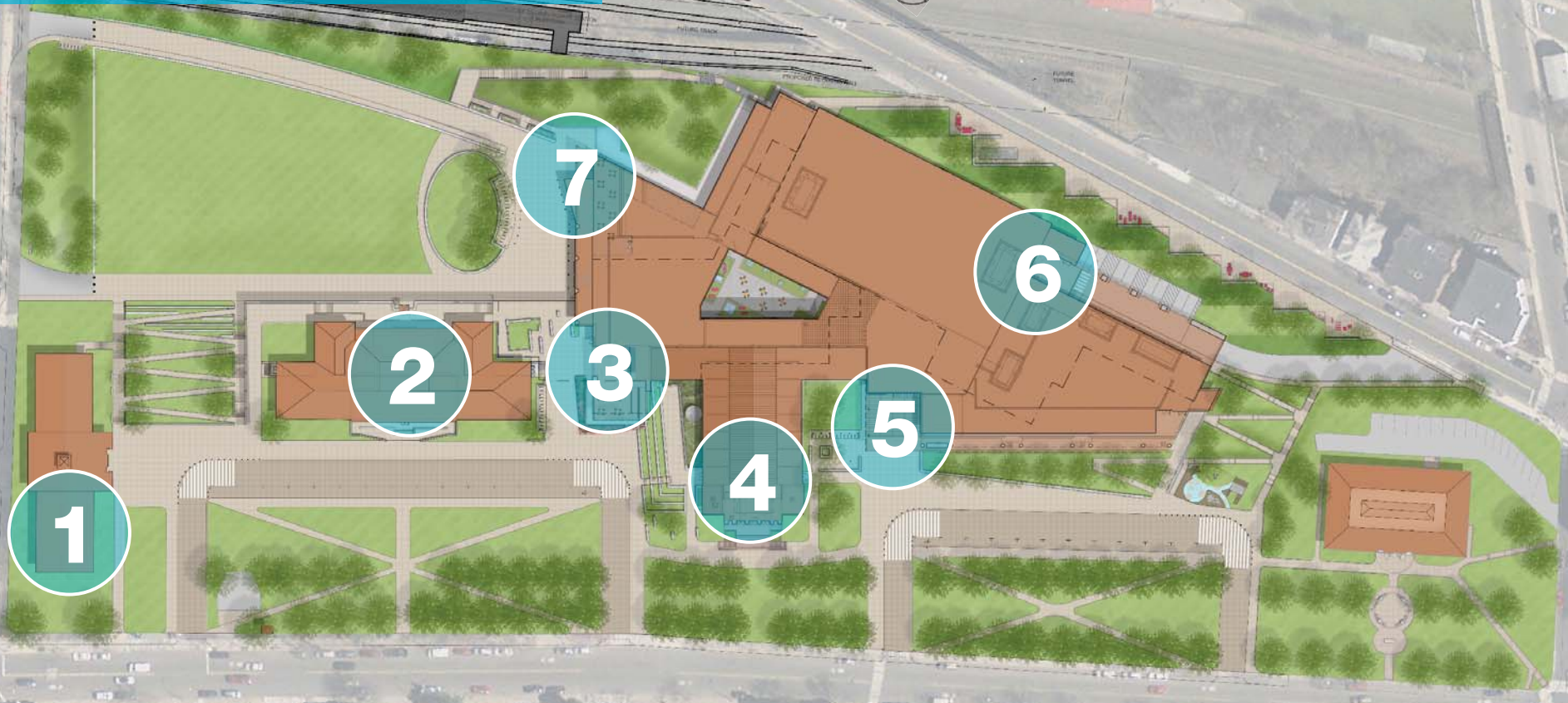
- 
- 4. Central Library
 - 24 Full time Staff
 - 6 Part time Staff
 - 179,086 Visits in 2017

- 1. City Hall
 - 127 Full time Staff
 - 6 Part time Staff
 - 14 Offices / Agencies

- 2. Municipal Offices
 - Full time Staff – TBD
 - Office's Agencies - TBD

- 3. Somerville High School
 - 285 Full time Staff
 - 1600 Students
 - Open 24/7/365

Access Opportunities



City Hall:
1. Agencies

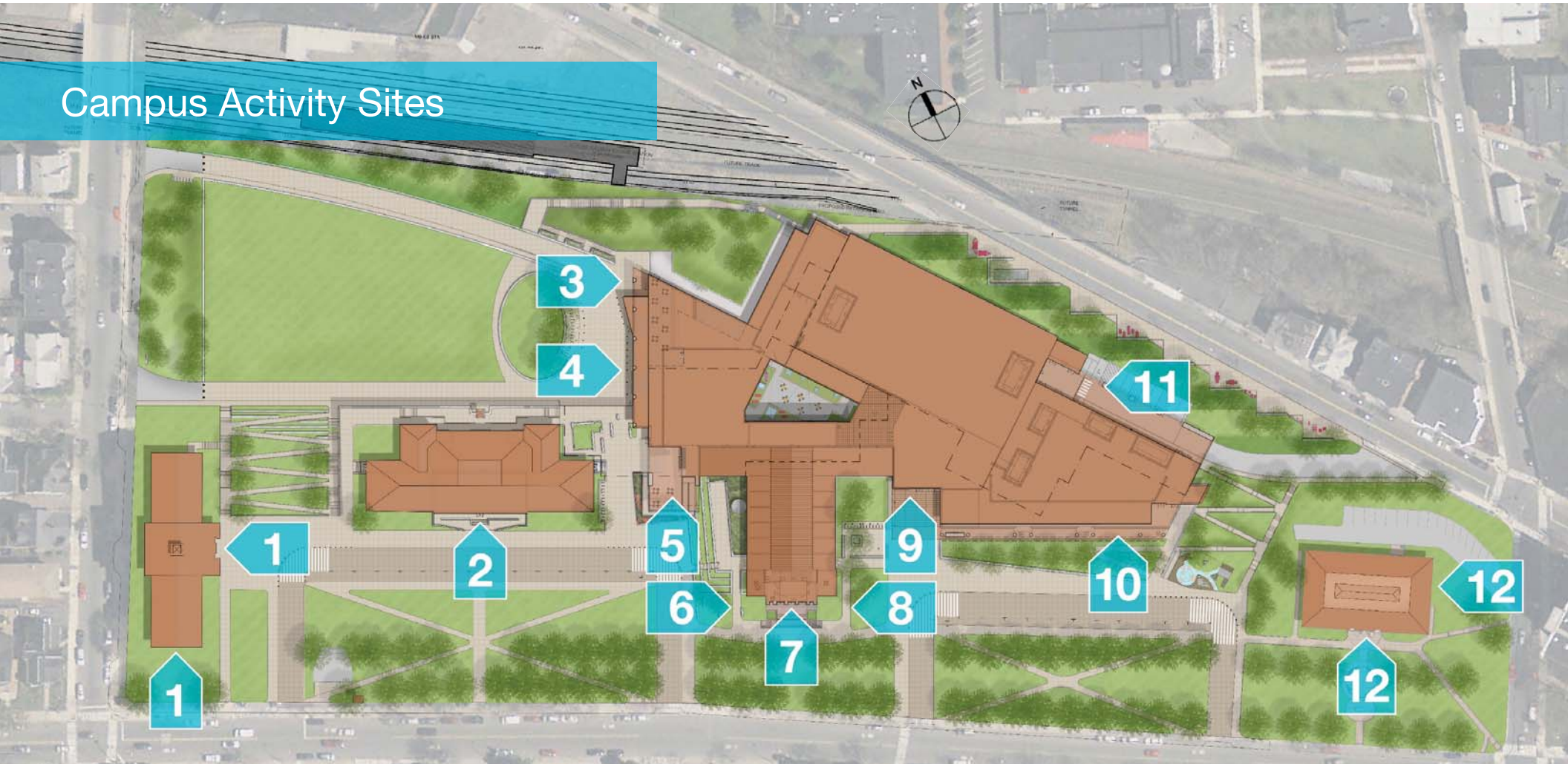
1895 Options:
2. Municipal Agencies

High School:
3. Highlander Cafe

4. Auditorium
5. SCTV & CVTE

6. Fabville
7. Vocational Program

Campus Activity Sites



1. City Hall

2. City Hall Services

3. NW FC

4. Auto Tech

5. Student Cafe

6. City Cable

7. Auditorium

8. Cosmetology

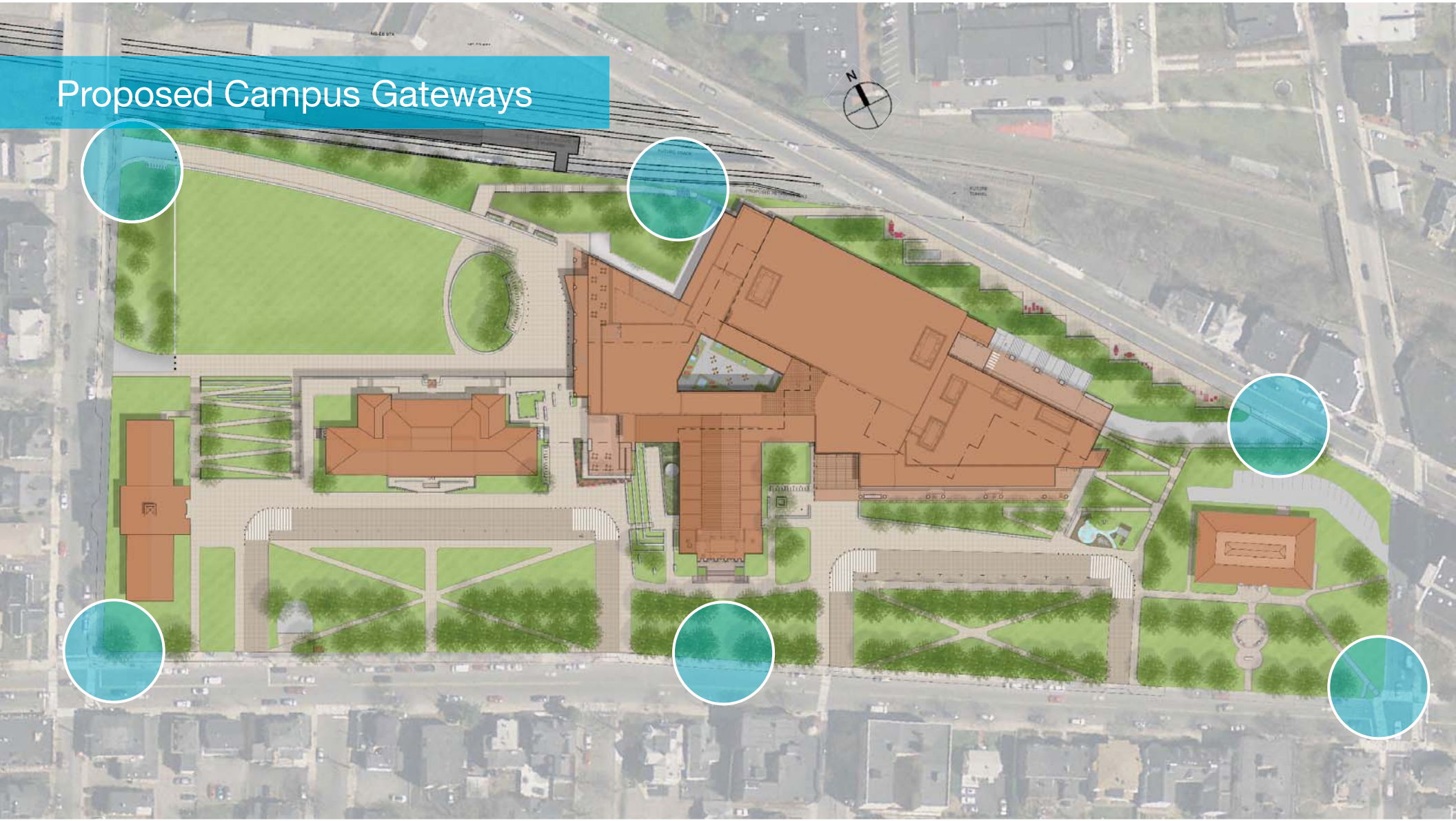
9. High School

10. Daycare

11. Fabville

12. Library

Proposed Campus Gateways



Campus Plan Concepts

Planning Overview

Concept 1: Allée

Concept 2: Promenade

Concept 3: Central Hill Concourse

Campus Planning Vision

Create an inviting and comprehensive campus plan that embodies the values of the City of Somerville:

- Accessibility
- Inclusion
- Environmental Stewardship
- Respect for Local History

Campus Planning Goals & Objectives

- Achieve historically appropriate, unified sense of place
- Respectfully incorporate war memorials
- Integrate the Central Library into the civic experience of the campus
- Improve accessibility within the campus
- Achieve Carbon Net Zero or Net Zero Energy Ready (NZE) campus
- Systemically mitigate storm water impacts
- Utilize landscape and urban design elements and wayfinding to enhance user experience
- Provide meaningful public process

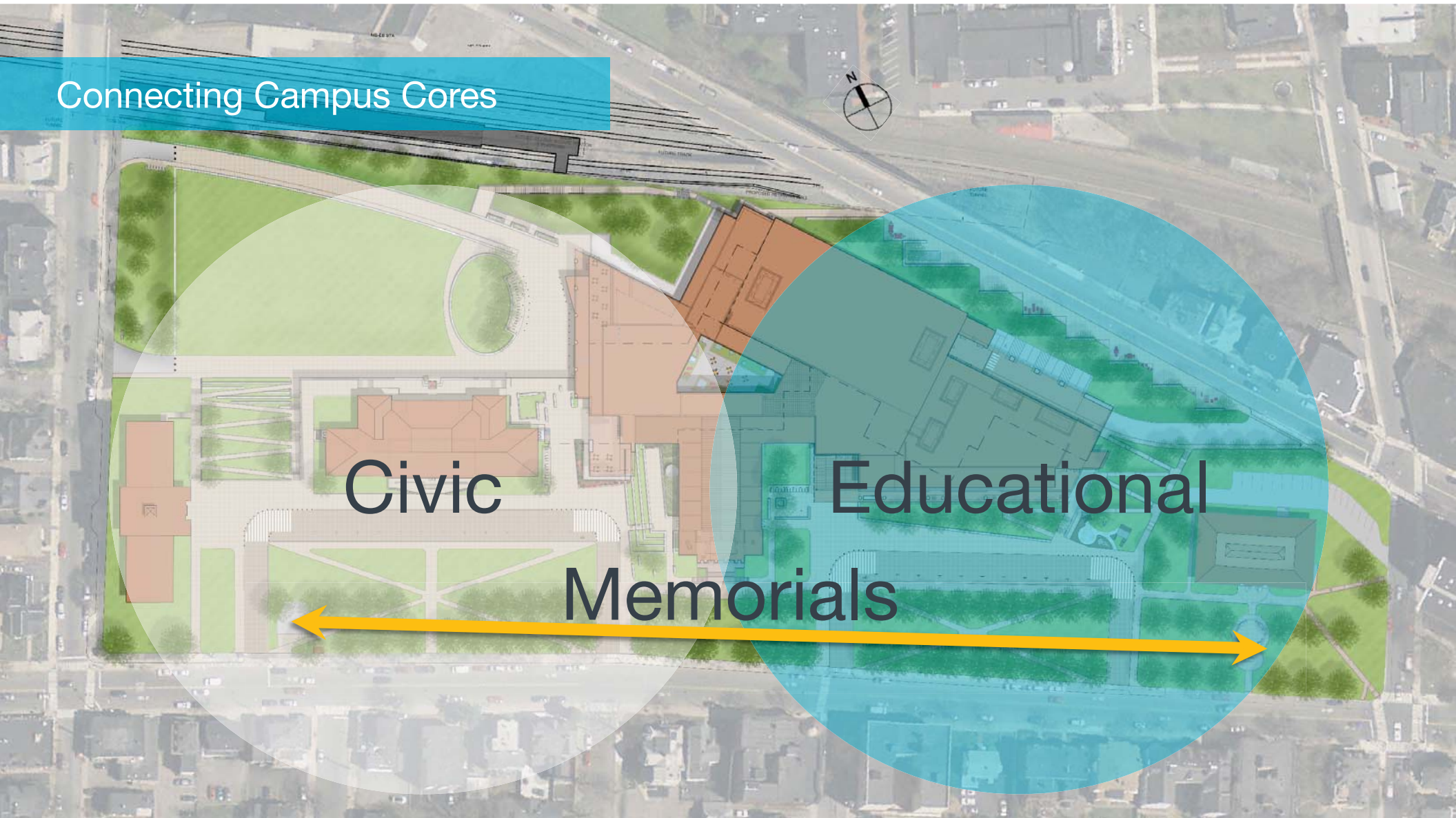
Goal of Public Process

- Share with the public campus plan design concepts
- Gather and incorporate feedback

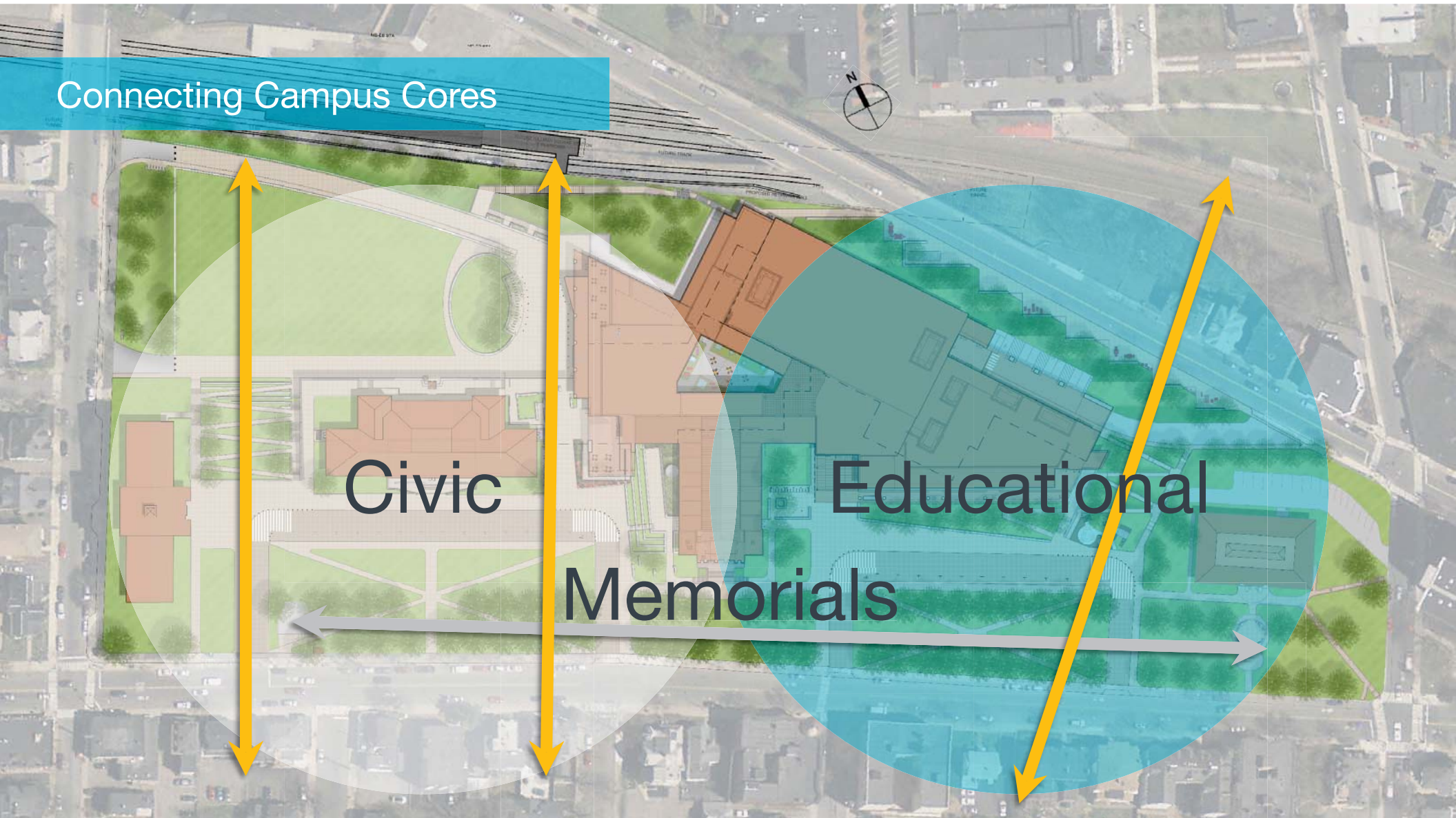
Planning Design Parameters

- Somerville High School Master Plan and project scope as a starting point
- GLX Gilman Station and Community Path
- Parking and Traffic Studies
- Building Use Space Plans for City Hall and 1895 Building
- Re-creation of Central Hill playground
- Respectful and chronological incorporation of war memorials

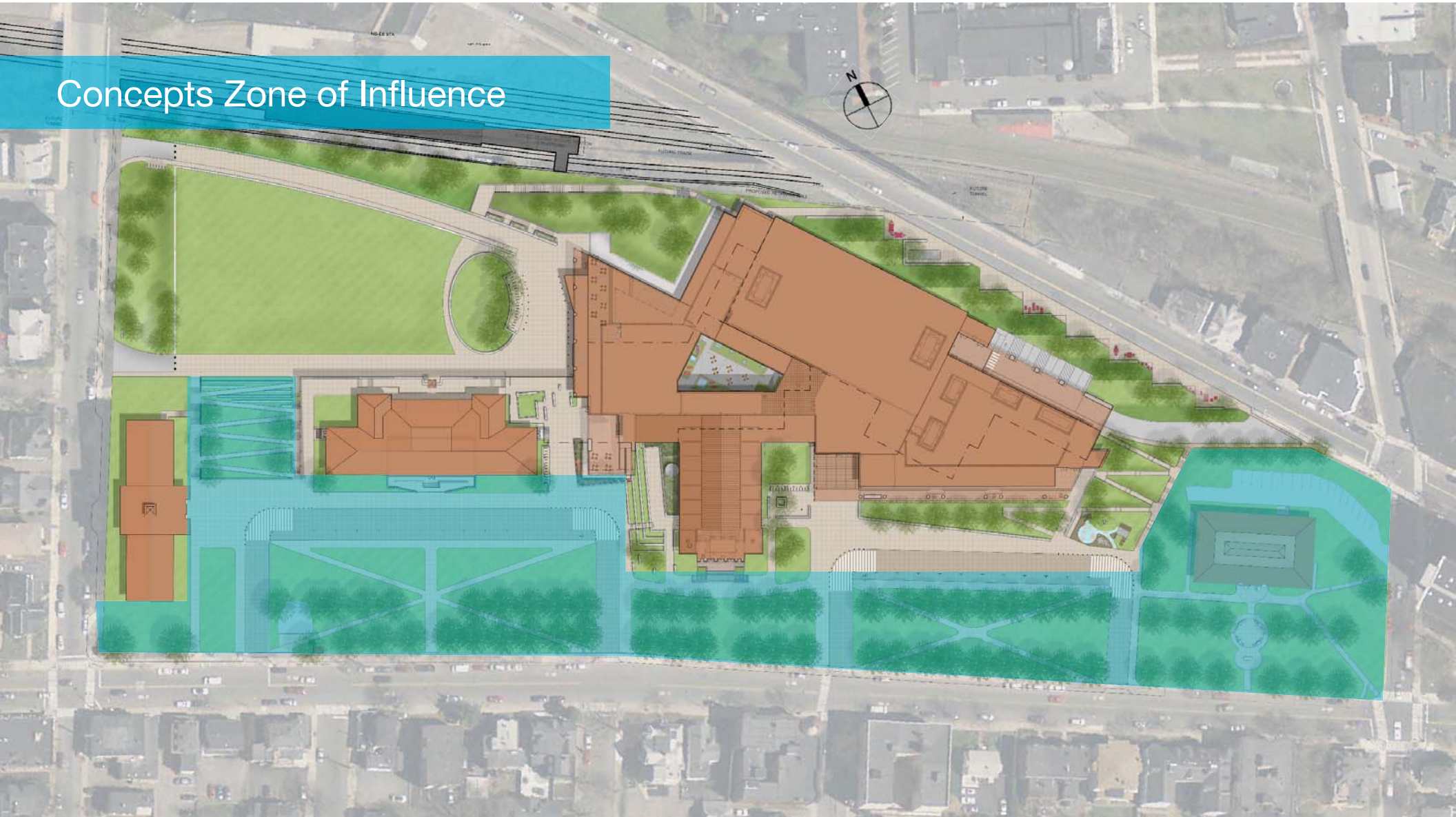
Connecting Campus Cores



Connecting Campus Cores



Concepts Zone of Influence



Universal Program & Design Opportunities



Accessibility to City Hall and 1895 and across campus



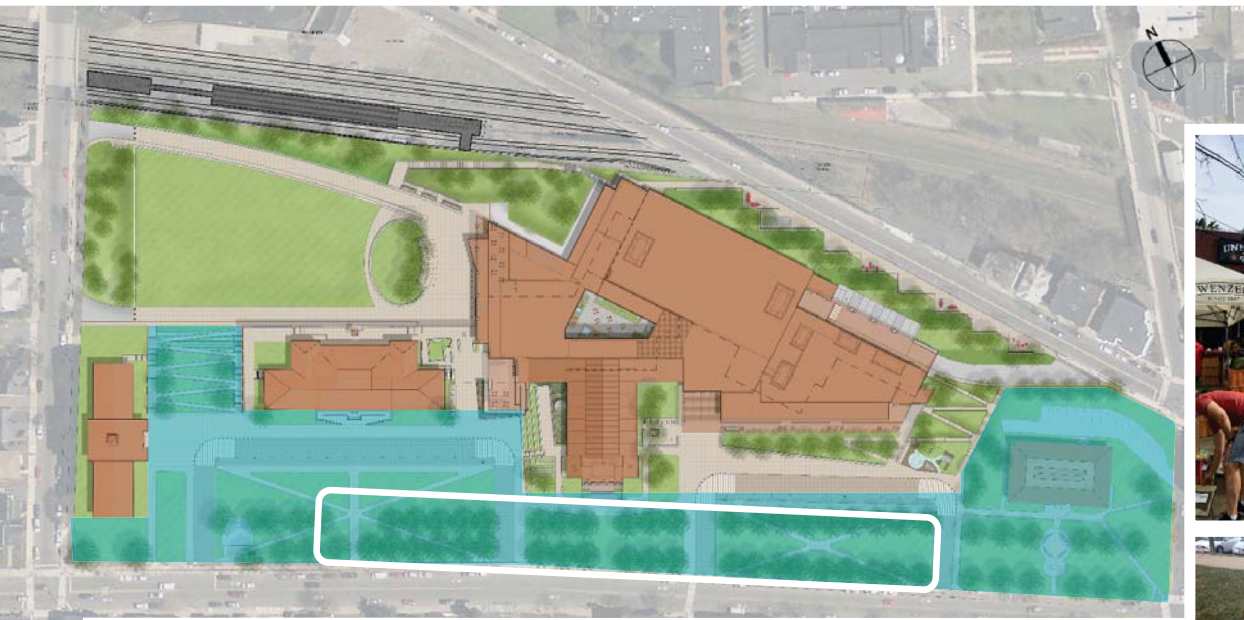
Universal Program & Design Opportunities



Presence of City Hall, dedicated pedestrian plaza, gateway at School and Highland



Universal Program & Design Opportunities



Centralized / chronological placement of memorials



Universal Program & Design Opportunities



Library: usable green space, sloped edge, adjacent play space



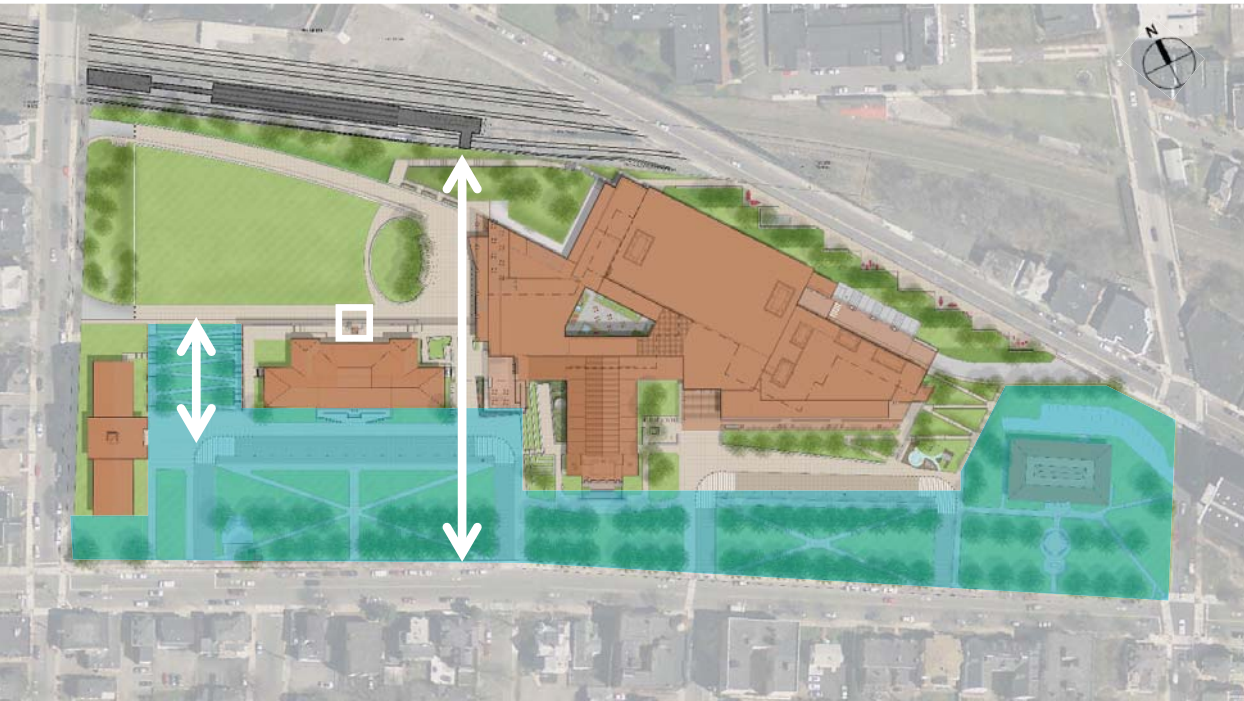
Universal Program & Design Opportunities



Library: potential expansion, campus gateway at Walnut and Medford



Universal Program & Design Opportunities



Accessible route to Gilman Station and
on the hill west of 1895



Universal Program & Design Opportunities

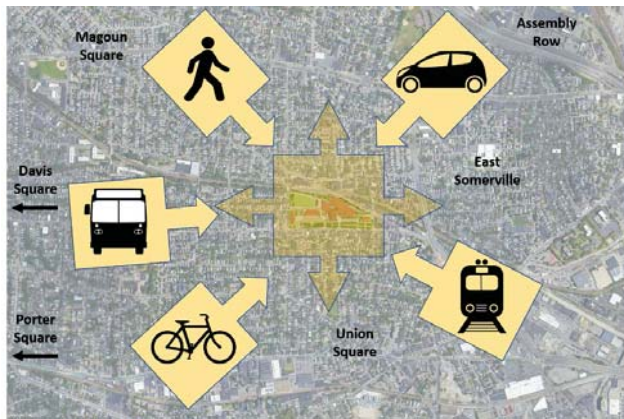


Activate adjacent space at community path and re-create a sledding hill

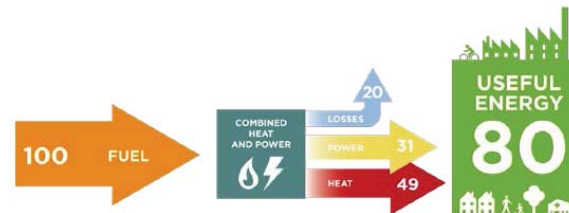


Universal Program & Design Opportunities

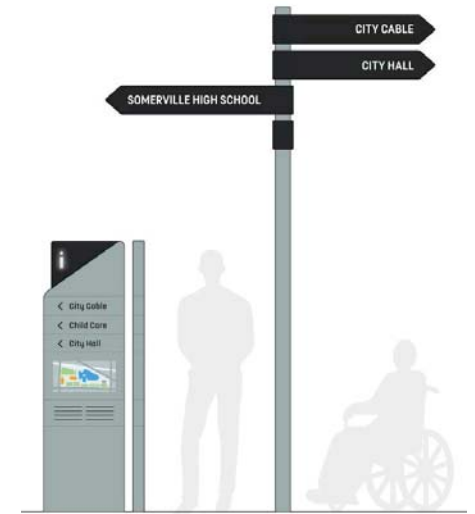
Multi-Modal Transit



Sustainability and Storm water Mitigation



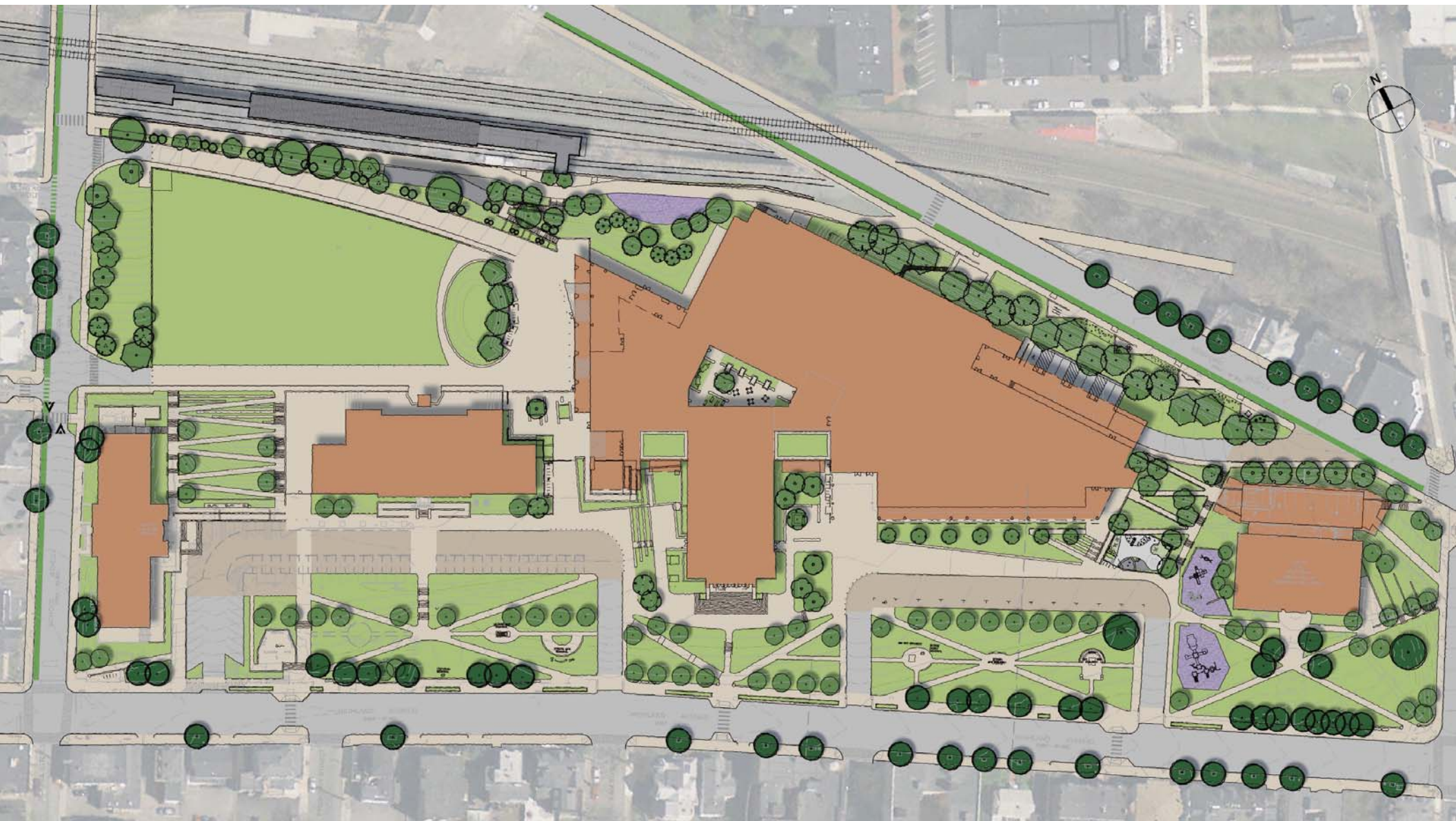
Environmental Graphics and Campus Wayfinding



Concept 1: Allée

- A walkway lined with trees or tall shrubs
- Characterized as formal, traditional, stoic, and passive
- SHS Master Plan as basis of design





Concept 1: Allée Highlights

- Memorials centrally located in green space of the allée
- Honor roll stays in place, renovate and incorporate access
- Vehicular access remains, no dedicated pedestrian plaza
- Parking maintains end of SHS project numbers
- Maintains existing trees along Highland
- Vegetated buffer at curb edge to function as a reinforcement of safe crossing and storm water management



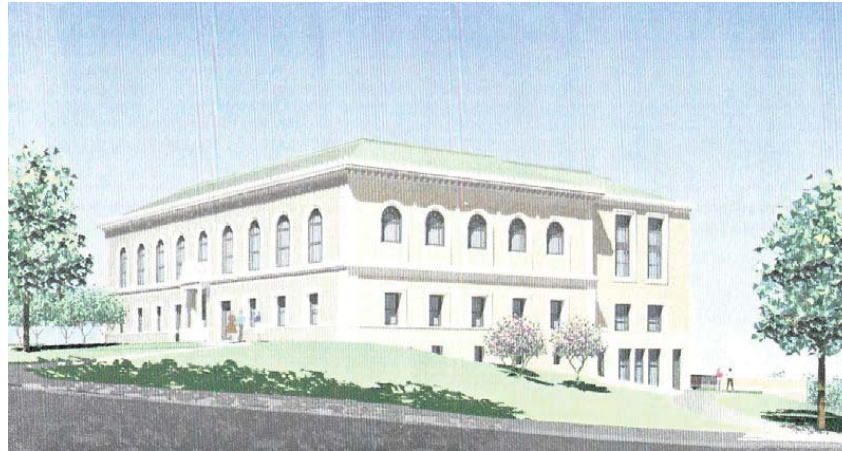
Concept 1: Allée

Section view of Highland Ave.



Concept 1: Allée

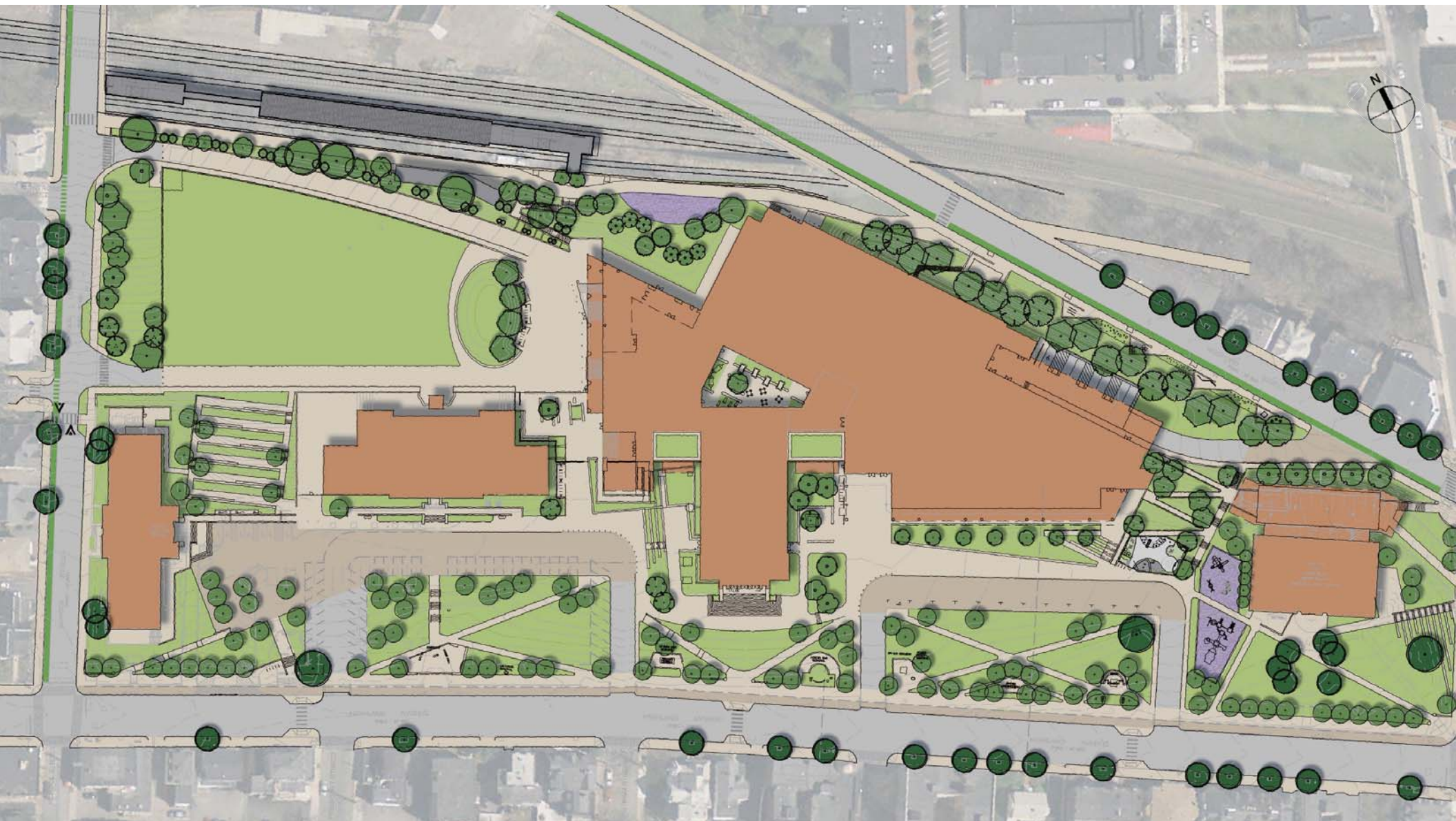
Central Library



Concept 2: Promenade

- A wide path for walking; a leisurely walk or ride especially in a public place for pleasure or display
- Highland Ave. walkway becomes enhanced pedestrian / cyclist oriented zone as a setting for the memorials to engage with the most active and visually prominent space of the campus





Concept 2: Promenade Highlights

- Doubles width of existing walkway to 20 ft to accommodate shared bicycle / pedestrian zone
- Memorials located directly along Highland for visual prominence with vegetated buffers for respectful visitation
- Honor Roll moves to align with 1895 Building as pedestrian gateway to the civic core
- Vehicular access realigns with Prescott
- Parking numbers slightly reduced from SHS project numbers that affords opportunity for dedicated plaza and visual prominence to City Hall
- Removes existing trees along Highland and strategically replaces trees to emphasize visual corridors and renew streetscape plantings
- Vegetated buffer along walkway to function as aesthetic separation for memorials and storm water management features



Concept 2: Promenade

Section view of Highland Ave.



Concept 2: Promenade

City Hall Plaza



Concept 3: Central Hill Concourse

- A coming together; a gathering; a large open area or hall where crowds gather
- City Hall Plaza and Library Green bookend Central Hill campus as large open areas
- Highland Ave streetscape connects the primary open spaces in a coming together of memorials, existing and new landscape elements, and storm water features





Concept 3: Central Hill Concourse Highlights

- Memorials integrated into Highland streetscape
- Honor Roll becomes a landmark / gateway emphasizing the War Memorial Building
- Vehicular access realigns with Prescott
- Parking numbers slightly reduced from SHS project numbers that affords opportunity for dedicated plaza and visual prominence to City Hall
- Maintains majority of existing trees along Highland and strategically replaces trees to emphasize visual corridors and renew streetscape plantings
- Vegetated buffer along walkway to function as aesthetic separation for memorials and storm water management features



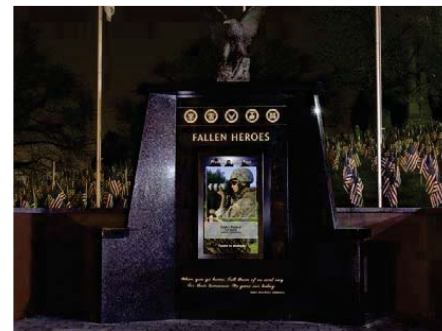
Concept 3: Central Hill Concourse

Section view of Highland Ave.



Concept 3: Central Hill Concourse

Honor Roll as Campus Gateway at War Memorial Building

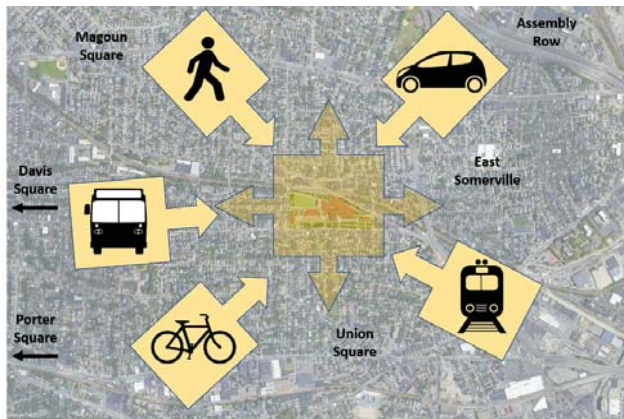


Universal Program & Design Opportunities

Transportation
Sustainability
Wayfinding

Universal Program & Design Opportunities

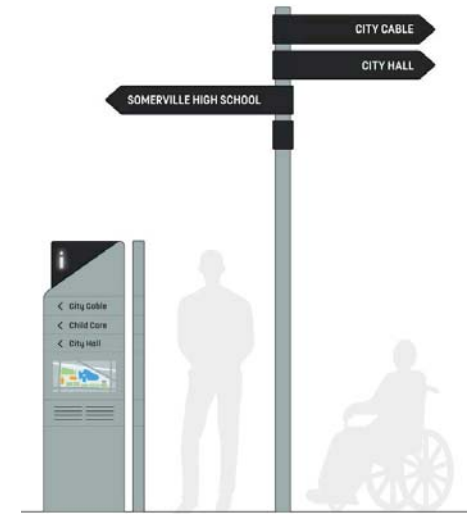
Multi-Modal Transit



Sustainability and Storm water Mitigation



Environmental Graphics and Campus Wayfinding



Transportation

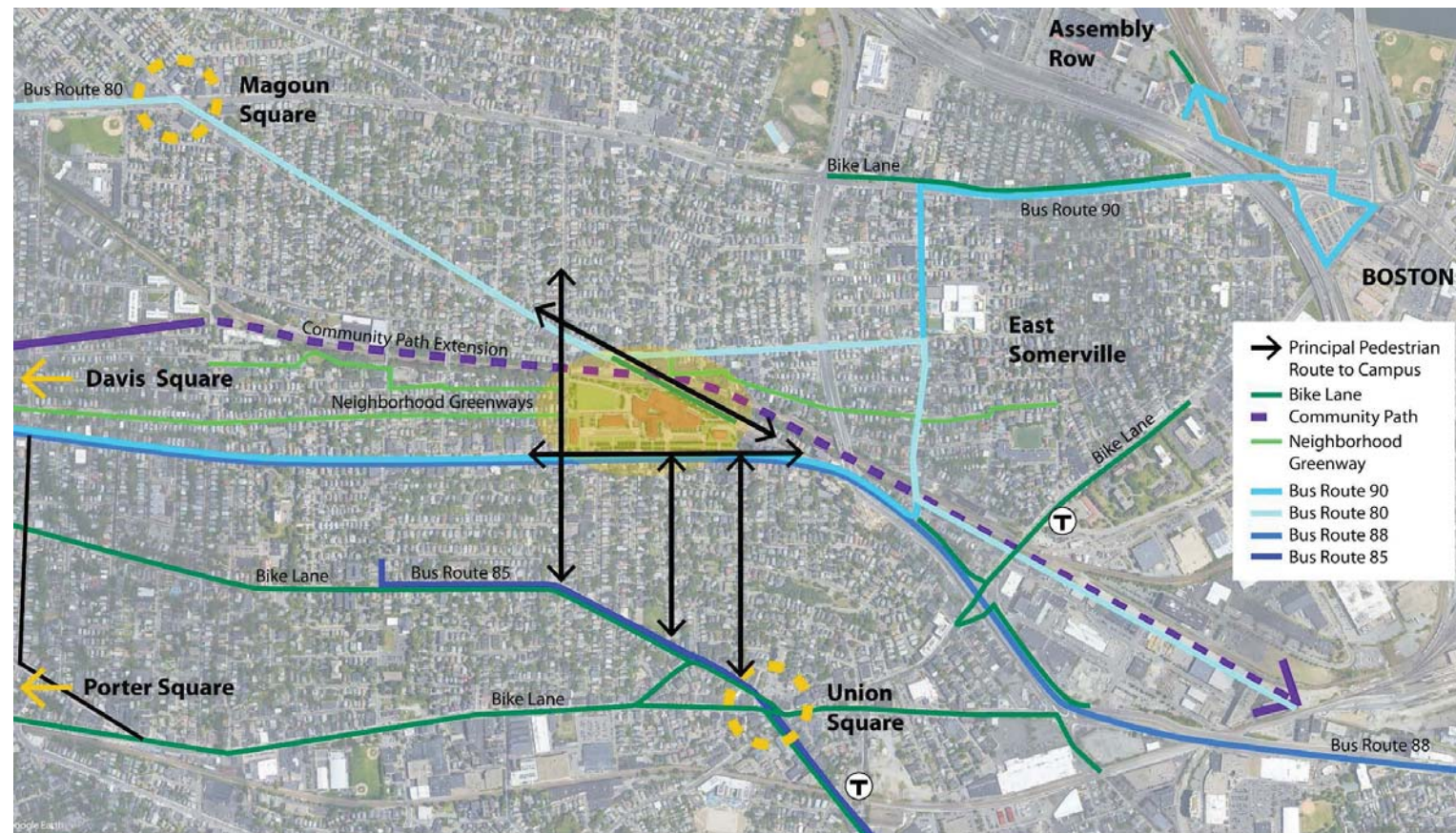
Transportation

Modes

- Walking
- Biking
- Driving
- Transit

Topics

- Site access
- Traffic calming
- Grade challenges
- Community path
- Future street traffic patterns
- MBTA bus stops



Driving

City conducting a parking analysis and has a meeting scheduled to discuss parking

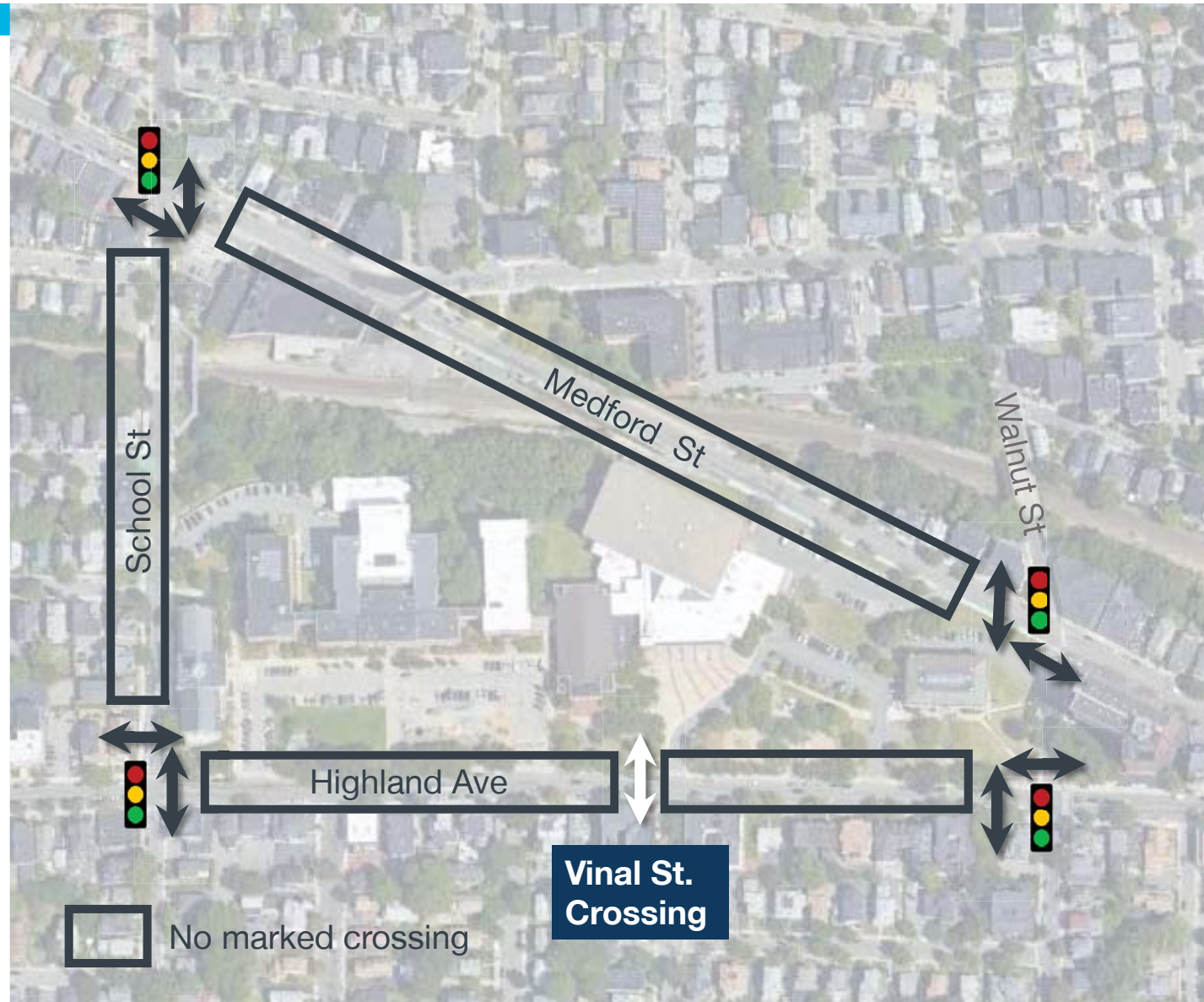
School Street to change from one-way to two-way from Medford St to Somerville Ave



Driving

Considerations

- Where people are coming from and their destinations
- Existing and needed safe crossings
- Signalization



Walking



Proposed New Crossing



Suggested Crossing Improvements



Walking

Proposed Madison & School Street Crossing



Raised Crosswalk

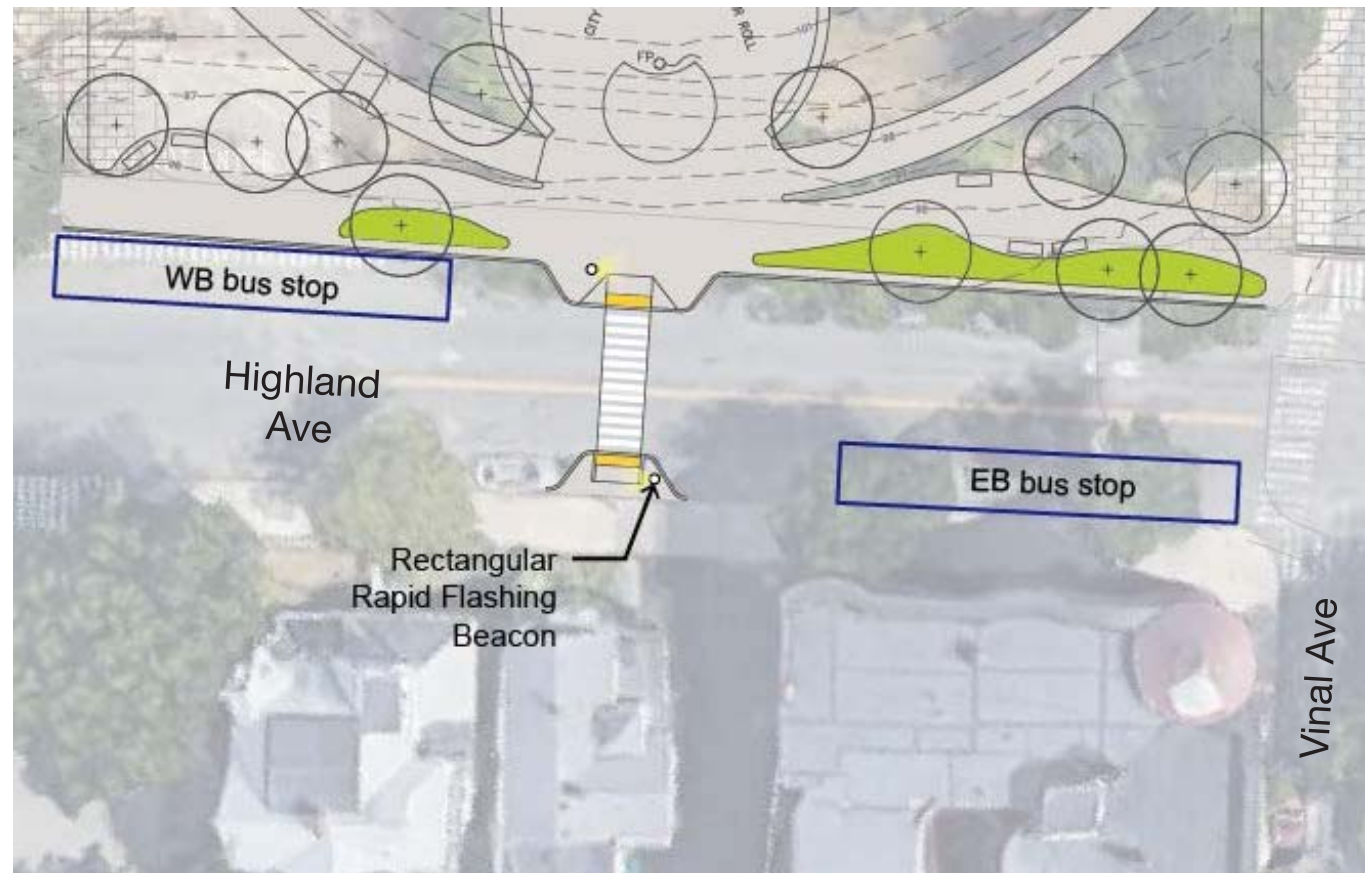


Walking

War Memorial Proposed Clearing



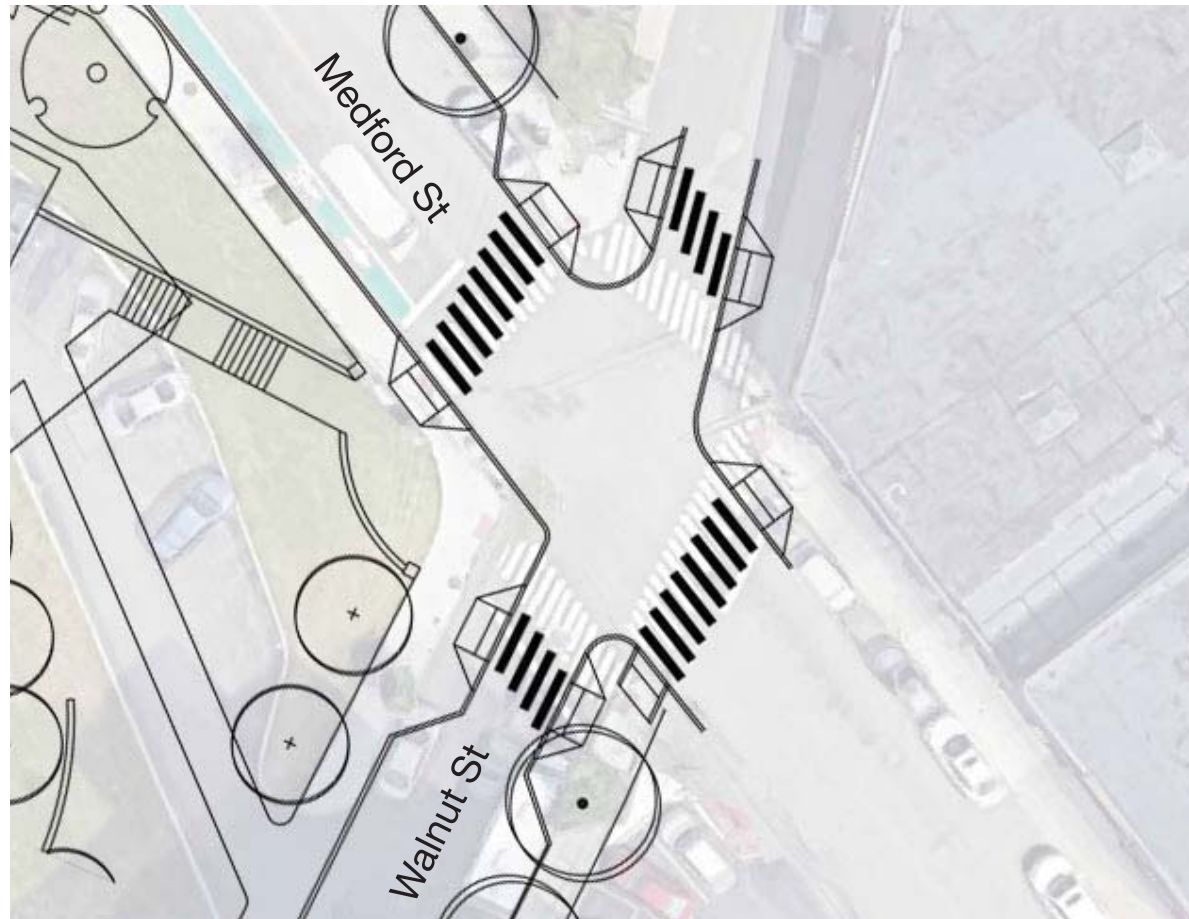
Rectangular Rapid
Flashing Beacon



Walking

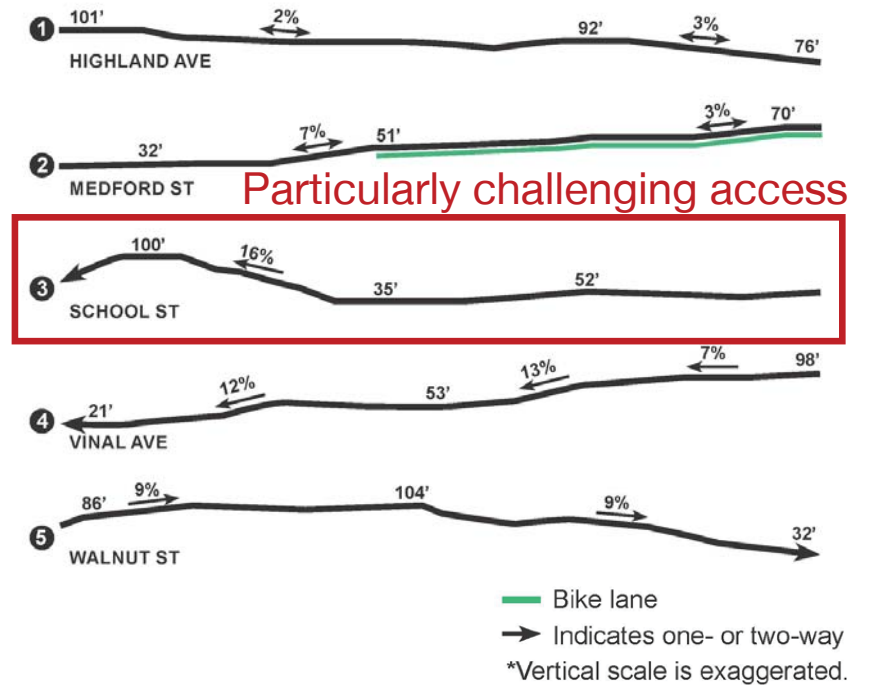
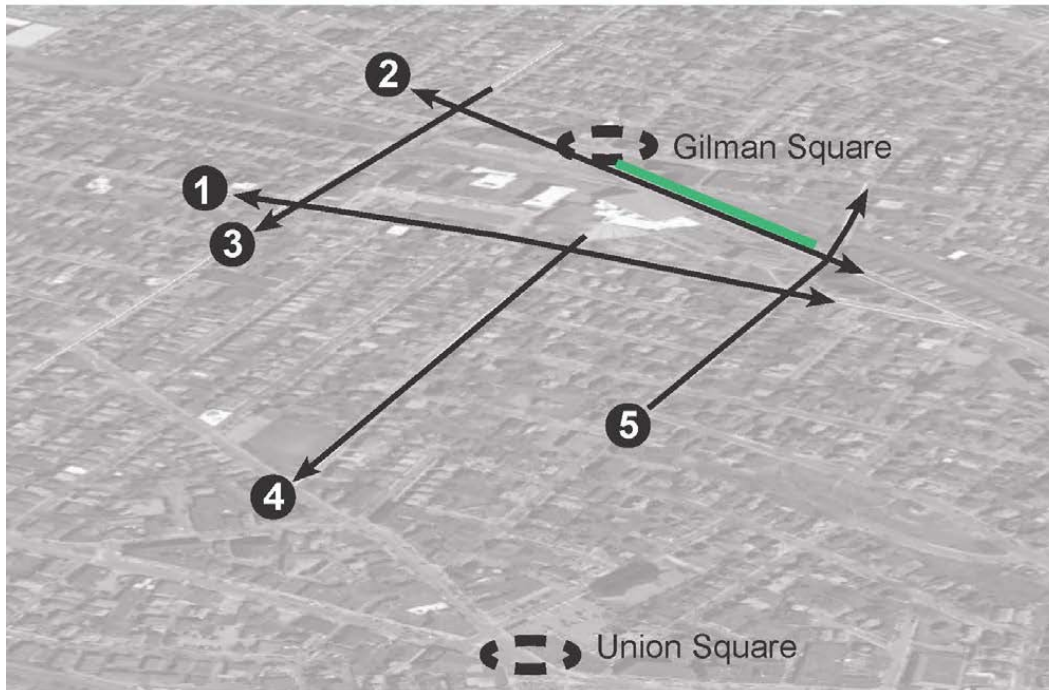
Intersection Improvement: Medford St & Walnut Street

- Extend curb to shorten crossing time for pedestrians and widen sidewalk
- Provide directional crossings rather than existing apex
- Improve crossing signals



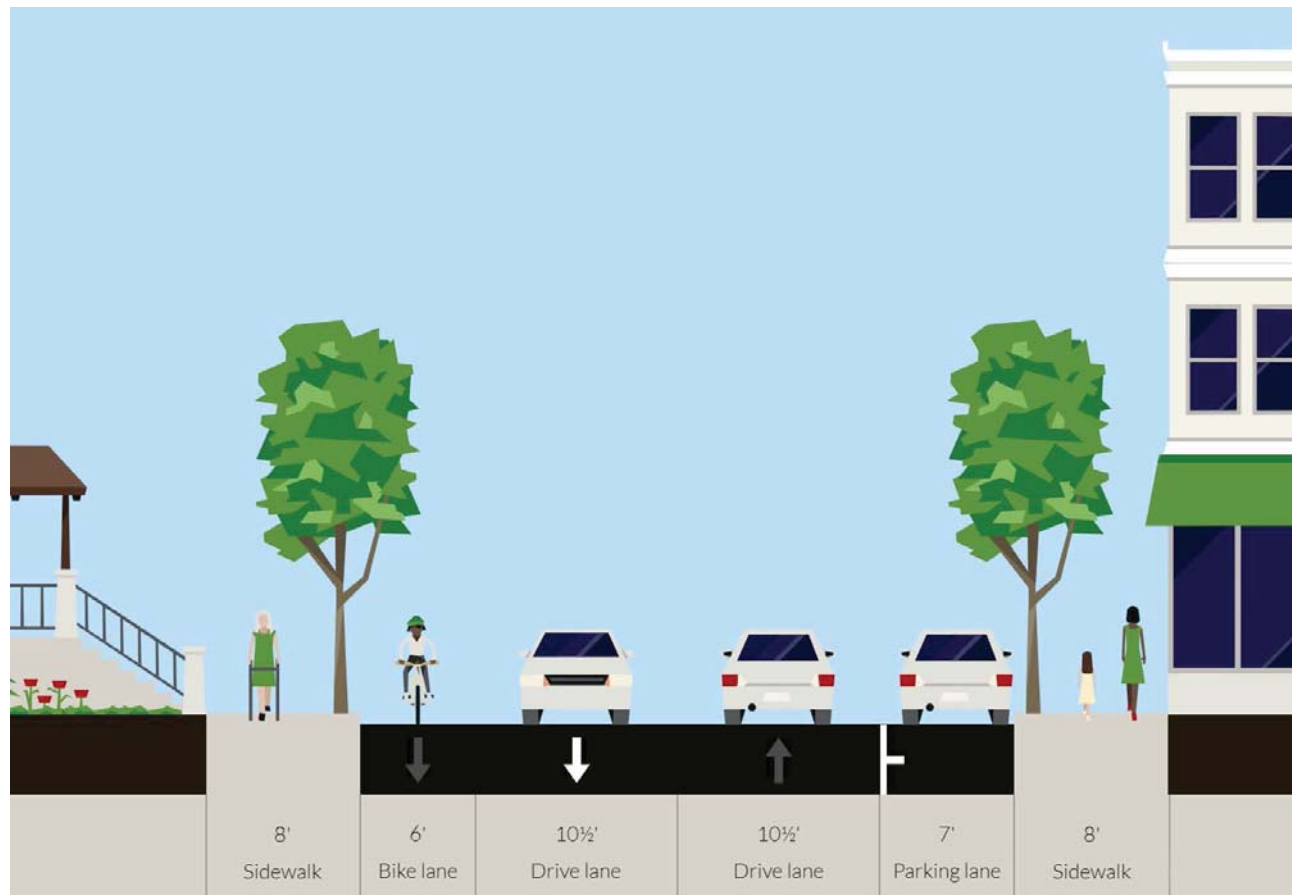
Biking

Significant Grade Challenge



Biking

School St Proposed Bike Lane



Bicycle Parking Locations

GLX Bike Storage Facility



Transit

Green Line Extension (GLX)



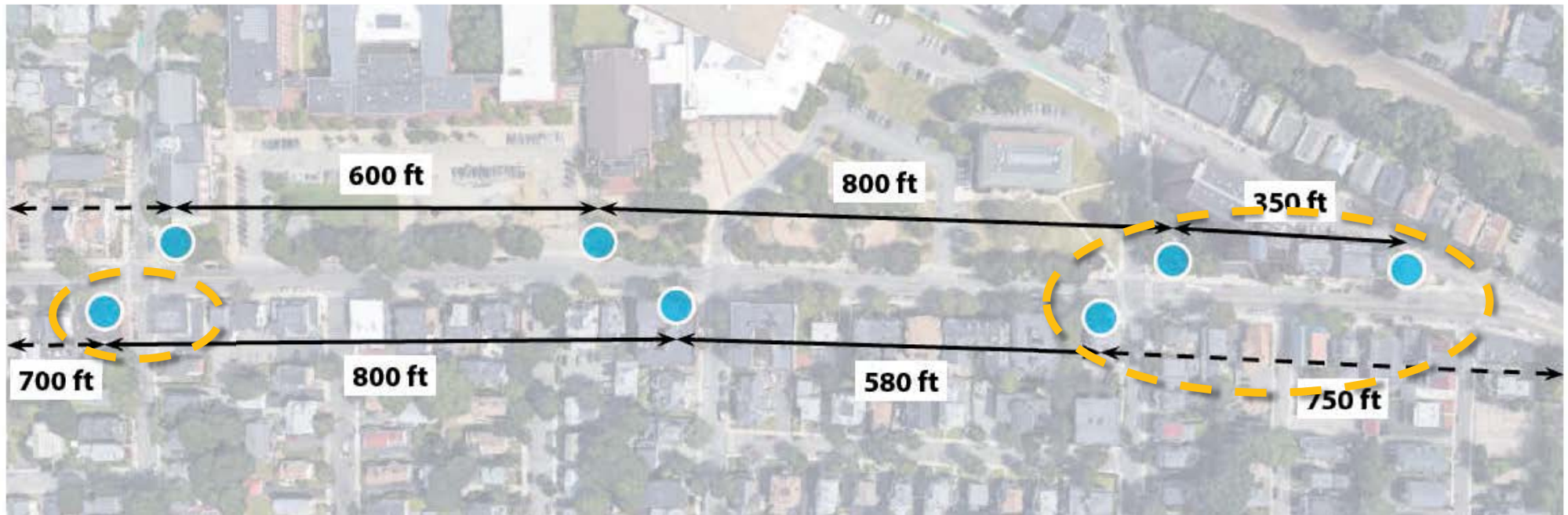
Gilman Square Station Ground Breaking

- **Pedestrian crossing to be constructed at Gilman Sq**
- **GLX to replace bus route 80**



Transit

Bus Stops



Looking at potential changes to bus stops to reduce intersection crossing for pedestrians and provide operational improvements

City of Somerville




Central Hill Campus Access Planning

instructions


add places that you currently go within the study area by selecting "Points" on the menu bar and selecting "Destinations." Once you place a point, you'll be asked about the type of destination and how you usually reach it.

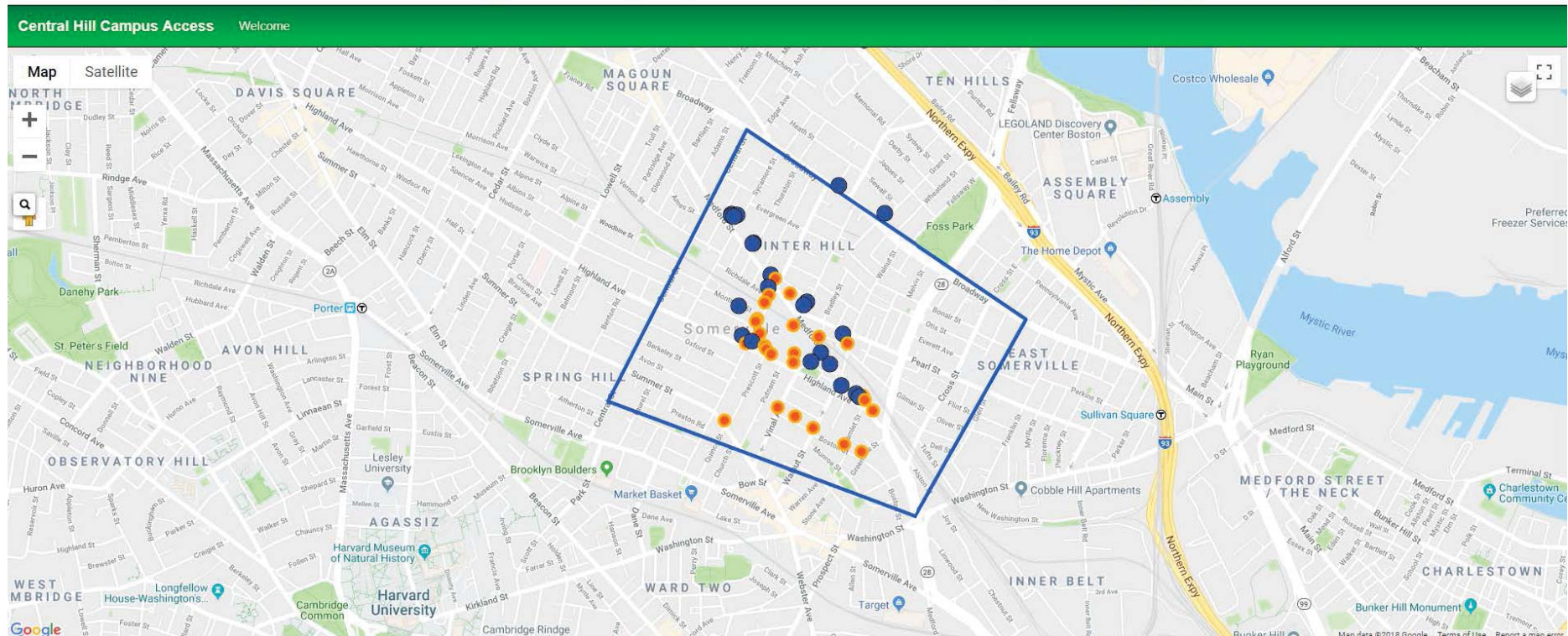
choose locations where you have concerns by selecting "Points" on the menu bar and selecting "Area of Concern." When you place a point, you'll be asked about why you have concerns about this area.

user input

-  Destination
-  Area of Concern
-  Study Area Boundary

review

Click the  layers icon below to toggle on/off input from other people



Contribute to the Central Hill Campus Wikimap

<https://www.somervillema.gov/departments/central-hill-plan>

Sustainability

Building Energy

Renewable Energy

Stormwater Use & Control



Goals

Create a carbon neutral campus

- Minimize energy needs
- Provide energy from renewable sources

Reduce stormwater runoff

- Reduce impervious cover
- Capture water for reuse on-site
- Promote infiltration



City Hall: 38,000 SF

- **Existing Energy Use Intensity (EUI):**
95 kBtu/sf-yr
- **Average office building energy use:**
Boston Energy Reporting Disclosure Ordinance (BERDO) EUI (2016): 74 kBtu/sf-yr
- Commercial Building Energy Consumption Survey (CBECS) EUI (2003): 105 kBtu/sf-yr



1895 Building: 67,420 SF

- **Existing Energy Use Intensity (EUI):**
Unknown (Currently part of High School)
- **Average office building energy use:**
Boston Energy Reporting Disclosure Ordinance (BERDO) EUI (2016): 74 kBtu/sf-yr
- Commercial Building Energy Consumption Survey (CBECS) EUI (2003): 105 kBtu/sf-yr



Library: 23,000 SF

Existing EUI: 72 kBtu/sf-yr

Average library energy use

- **CBECS (2003): 123 kBtu/sf-yr**
- **BERDO (2016): 92 kBtu/sf-yr**



High School: 370,000 SF

Existing EUI: 58 kBtu/sf-yr

Modeled EUI: 40 kBtu/sf-yr

- Highly insulated enclosure
- Double glazed windows

- LED lighting and controls
- Decoupled ventilation from heating and cooling

EUI Targets

New Construction: 25 kBtu/sf-yr

Renovation: 35 kBtu/sf-yr

- Insulated walls and roof
- New windows (triple glazed)
- LED lighting and controls (interior and exterior)
- Decoupled ventilation from heating and cooling systems
- All electric HVAC systems

Renewable Energy

Renewable energy options considered during this study:





- Biomass
- Anaerobic Digestion
- Combined Heat and Power
- Ground Source Heat Pumps (geothermal)
- Wind turbine
- Solar Photovoltaic (electricity)
- Solar Thermal (hot water)

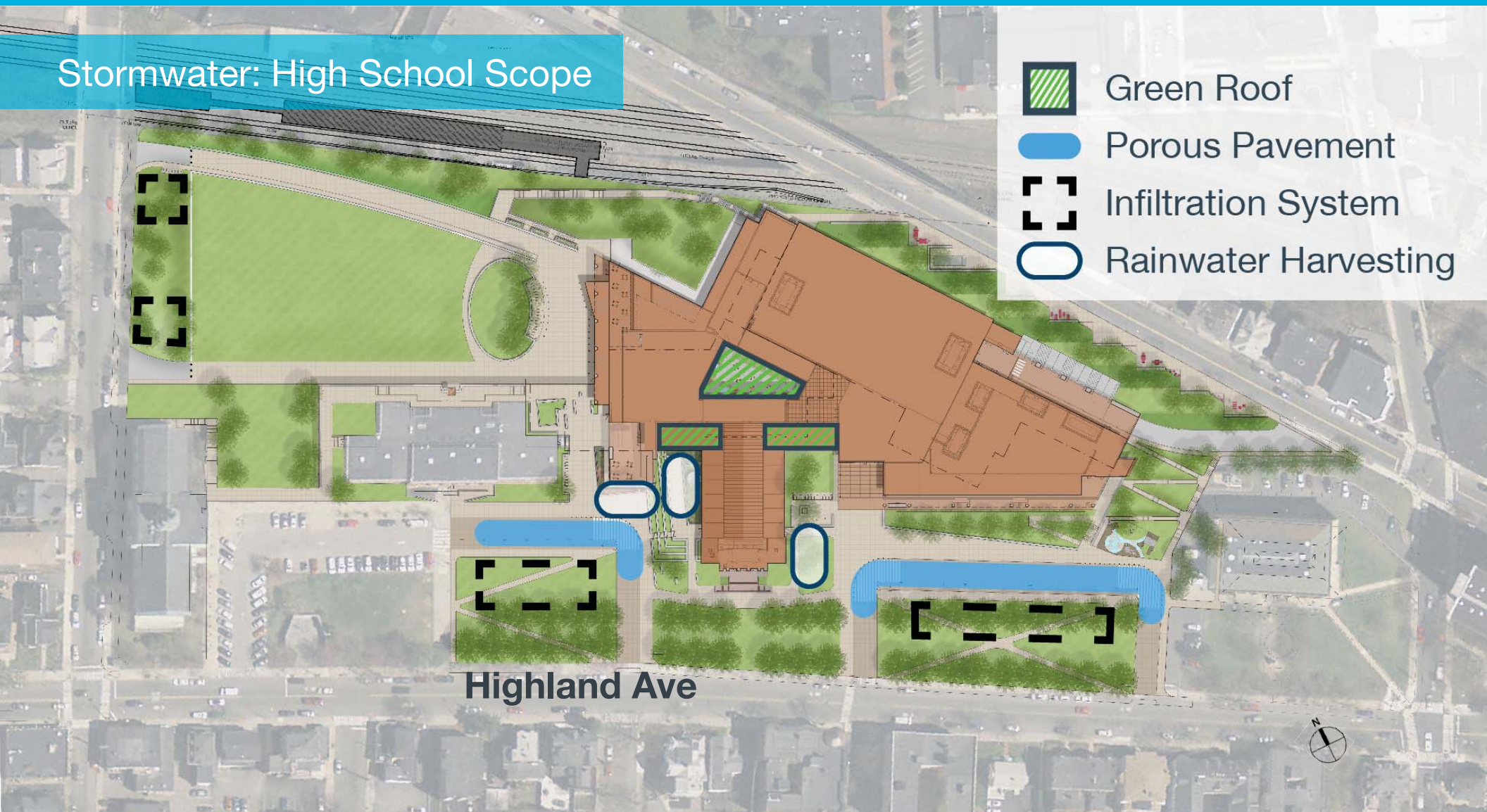
An architectural line drawing of a city block, showing various buildings and streets. A semi-transparent blue banner is overlaid on the top left, containing the title. Numerous rooftops across the block are highlighted in a solid blue color, indicating potential areas for solar panel installation. The drawing is a top-down perspective, showing the layout of the buildings and the surrounding streets.

Potential Rooftop Solar




- Rooftop solar is the best viable option
- If all of these areas were covered with photovoltaic panels, it would provide enough energy to make City Hall a net zero energy building.
- Achieving a carbon neutral campus will require purchasing renewable energy from the grid.

Stormwater: High School Scope

-  Green Roof
-  Porous Pavement
-  Infiltration System
-  Rainwater Harvesting



Stormwater: Expanded to Central Hill

-  Green Roof
-  Porous Pavement
-  Infiltration System
-  Rainwater Harvesting
-  Bio-Retention






Highland Ave

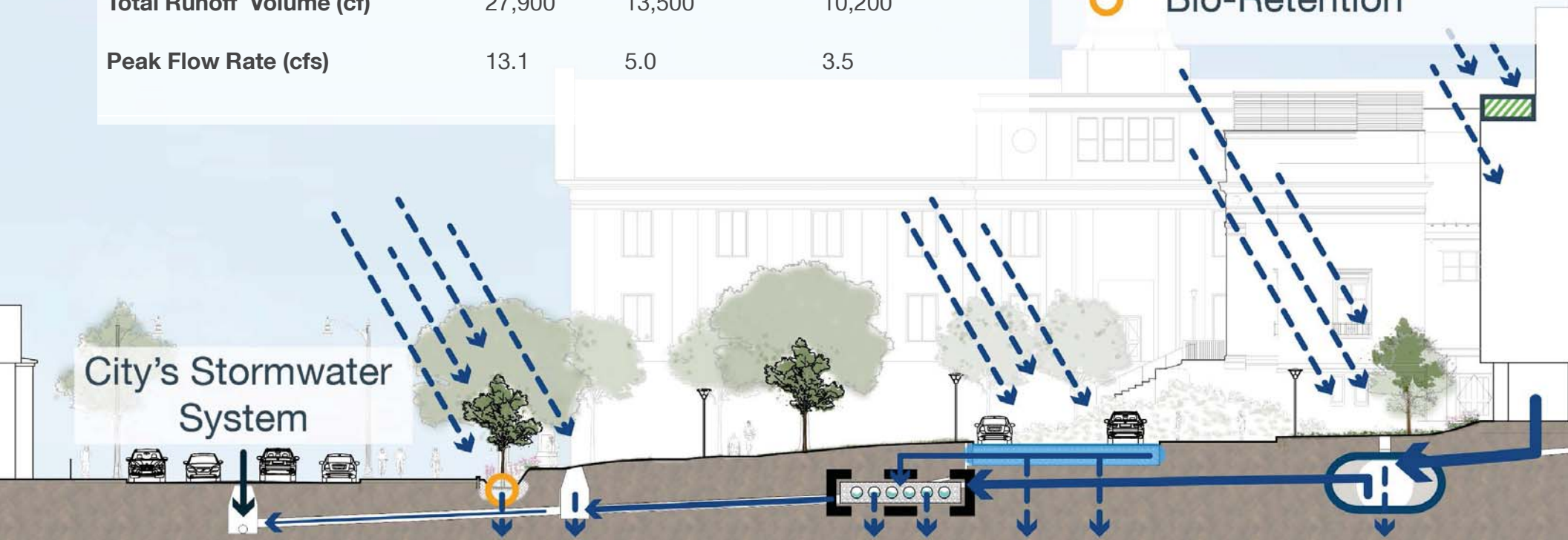


Reduction in Stormwater

95% Storm – 1.5"/24 hours

| | Existing Conditions | Post High School Construction | Potential of Central Hill Project |
|--------------------------|---------------------|-------------------------------|-----------------------------------|
| Total Runoff Volume (cf) | 27,900 | 13,500 | 10,200 |
| Peak Flow Rate (cfs) | 13.1 | 5.0 | 3.5 |

-  Green Roof
-  Porous Pavement
-  Infiltration System
-  Rainwater Harvesting
-  Bio-Retention



Wayfinding and Signage

Unifying Concepts

Signage Types & Levels

Location of Signage

Aligning with Current High School Design

Signage and Wayfinding

Unify the campus, creating sense of place



Design and materials take cues from site environment and complement.

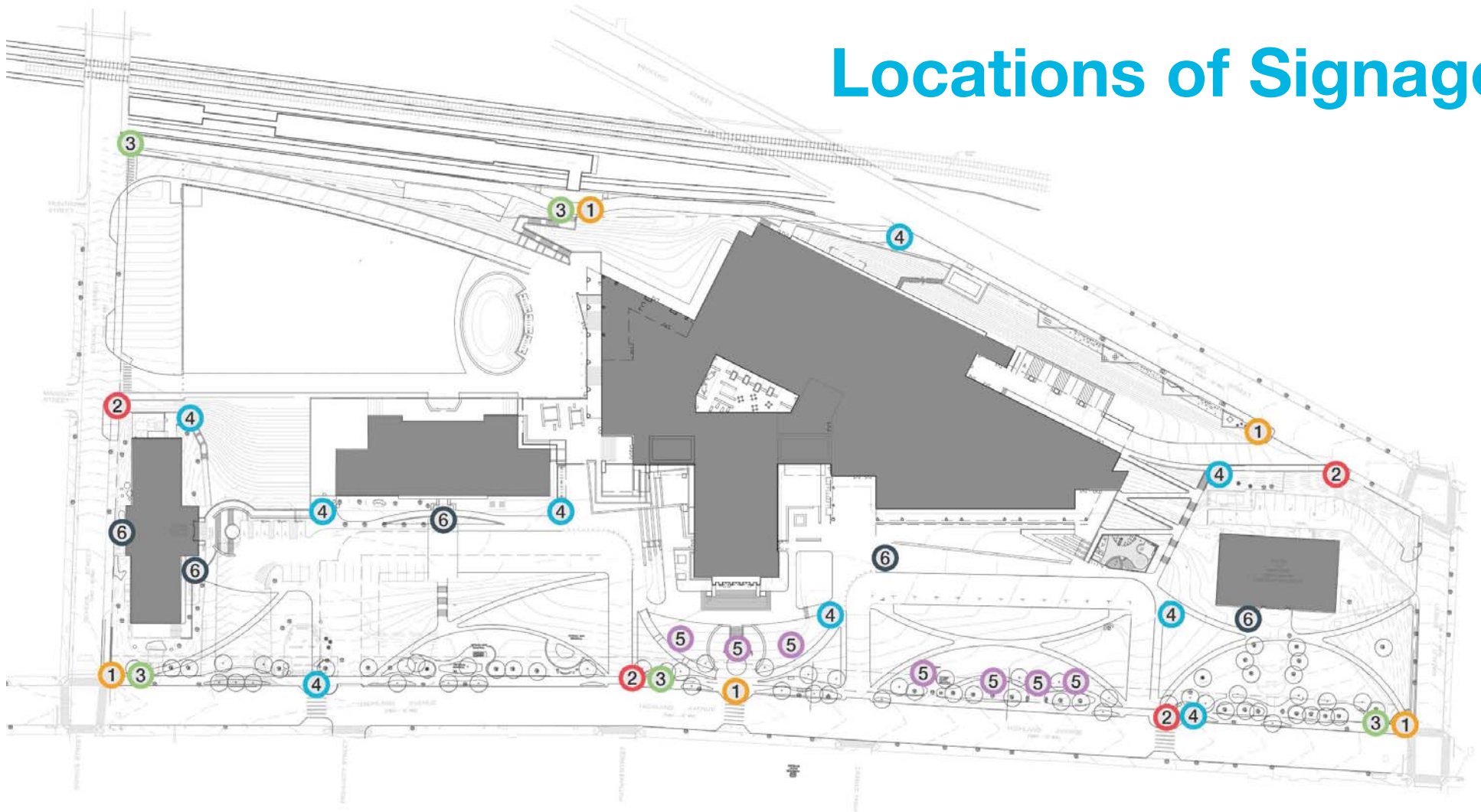
Graphics inform visitors of the campus.



Signage Levels

| | | Audience | Sign Type |
|--|---------|------------------------|-------------------------------|
| | Level 1 | Everyone | Gateway or Campus Markers |
| | Level 2 | Vehicles | Roadside Pylons |
| | Level 3 | Unfamiliar Pedestrians | Map & Directory |
| | Level 4 | Regular Pedestrians | Individual Destination Marker |
| | Level 5 | Monument Patrons | Informational Placard |
| | Level 6 | Everyone | Building Marker |

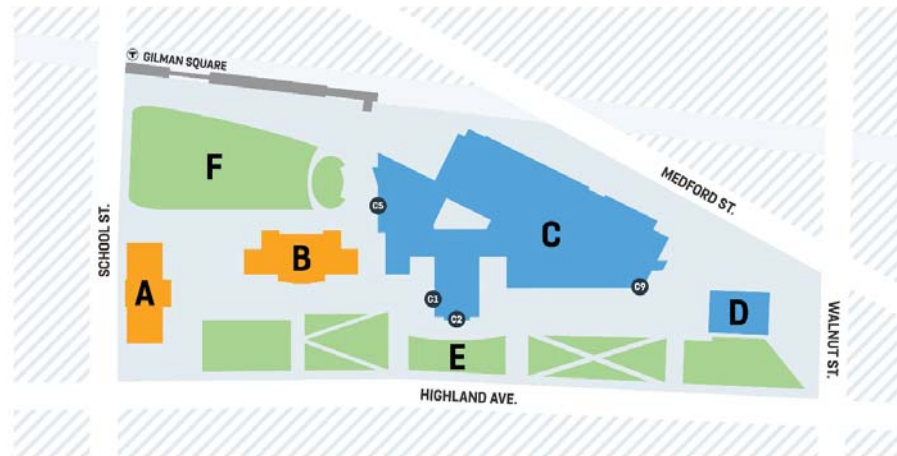
Locations of Signage



Campus Directory

Providing directions at multiple levels from the civic and educational commons, to individual city & school departments and their respective entrances.

Welcome to Somerville's Central Hill Campus



Civic Buildings

A - City Hall

Office of the Mayor
Communications
Elections
Personnel Payroll
Purchasing

Grants
City Clerk
Assessing
Treasury
Auditing

B - City Hall Annex

Health & Human Services
Information Technology
SCALE
Personnel

OSPCD
Housing
School Department - Central

Learning Buildings

C - Somerville High School

C1. City Cable
C2. Community Entrance
C3. Auditorium
C4. Cosmetology Dept.
C5. Next Wave Full Circle

C6. Cambridge Health Alliance
C7. Somerville Childcare
C8. Fabrication Lab
C9. Highlander Cafe
C10. Automation Dept.

D - Central Library

Park Areas

E - Monument Walk

World War I Monument
World War II Monument
Vietnam War
Monument 2
Monument 5

F - Recreational Field

Break-out Session & Discussion

Feedback

To offer feedback or thoughts please contact:
centralhill@somervillema.gov



Project Timeline

- Community Meeting #1 May 31, 2018
- Parking Study Meetings 1-3 Summer, 2018
- Memorials Commission Meeting June 20, 2018
- Community Meeting #2 Sept 25, 2018
- **Parking Study Meeting #4** **Sept 27, 2018**
- Community Meeting #3 Oct 18, 2018
- Campus Planning Study Complete Dec 28, 2018

Next Steps

- Document feedback from tonight's session
- Review with Campus Plan Committee
- Committee to select a preferred Option
- Design team to develop potential schedule and costs for implementation (may be phased over several years)
- Complete study by end of year

Thank you

For more information:

www.somervillma.gov/highschool/

www.somervillema.gov/centralhillplan/

Somerville High School Construction Camera:

<https://app.oxblue.com/open/Suffolk/somervillehighschool>